







FISH and SHIPS



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by

RALPH W. ANDREWS

and

A. K. LARSSEN



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PICKING FISH (copposite) Freeing fish from meshes of gillnet was just plain work, doing it fast an art. With the big run on, with hundreds of thousands of almon crowding together in the river, headed for their spawning beds, the speed at which a fishman can "pick fish" may mean hours of fishing time and hundreds of dollars. (Courtesy E. E. Murray.)

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DEDICATED

to an inveterate, incurable dreamer . . . an ingrained individualist in a regimented $world - the \ fisherman.$





THE PRICE OF FISH

The deep sea fishing boat "Republic" will never sail out for the tuna again, nor for the salmon—out of Astoria into the green swells from westward. Part of her bow has drifted ashore near Long Beach, and some of the forward deck—and where the hulk of her is, only the sea can tell. Her last port of call was the storm. And the fishermen who sailed her, and looked to her fishing gear, and harvested the sea? Where are they? Perhaps the gulls know, or the cormorants. Only this seems certain—that they and their boat will fish no more.

You walk through the market and glance at the fish stalls heaped with limp silver. Only a day or so ago these fish, most of them, were out where "the low sky mates with the sea." Now they bear price tags. Even fish, so we say, is high priced. That is true. Fish are high priced—and the least of the price is reckoned in coin.

Men who would rather fish at sea than work ashore sail out on the fishing boats to seek and follow the fish. It is a glad, hard life, and they love it well—but they stake their lives on the catch. It isn't often that the boats don't come back to port, for their oil-skinned skippers and crews to shout to their friends on the dock with word of their luck—but sometimes they don't. The "Republic" was one that didn't. And how are you going to figure that into the price of a pound of fish?

-From the Portland Oregonian



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... and the

SEA WAS FULL OF FISH

There were five canoes ready to be launched and Aktenta ordered the squaws away. They had been bringing baskets of food and extra clothing down to the beach hoping the men would change their minds about going fishing. They wanted to be taken out around the rocks and south to the mouth of the Hoh River to pick hops.

Ak-ten-ta pounded his fish-killing club against the side of the canoe and the dogs barked excitedly. Then he raised his hand, his voice sounding a stern rebuke. The men had no time to listen to such woman talk. People can not eat blossoms, he said. There were many halibut out beyond the Big Point—which the white men called Cape Flattery—and the Makahs of this village were going to catch them. The people needed food and this fish was better than the strong whale meat they had been eating for two moons.

FO'C'SLE OF HALIBUT SCHOONER (Opposite) There were no frills in the crew's quarters as time was more valuable on deck or in dories. Ladder forward could be swung down for access to escape hatch. (International Pacific Halibut Commission.) The swells were breaking high. Ak-ten-ta tossed the club into the boat and called to the other men. Six of them lifted the heavy one-piece craft and when the wave broke they ran through it. In one motion Ak-ten-ta and his boatman leaped in and were paddling the cance into the next white-topped crest. The roller broke and swept the boat up and over, emptying men and all into the foamy wash on the beach.

The men drew the boat back, draining it of water and gathering the scattered dunnage and tangled lines. The weather would be worse out beyond the Big Point, Ak-ten-ta said, but if they could reach deeper water, they could keep the cance steady. Only the worst winds would upset good paddlers in dugout cances. The boat was readied again and once more the launching was made—and once more the craft capsized. Up

INDIAN SALMON CACHE Vancouver Island—from album of Surgeon Lieutenant J. C. Eastcott of H. M. S. Reindeer 1867-8. (City Archives, Vancouver, B. C.)





INDIAN TRAPS Skagit Bay, Washington. (Dept. of Fisheries, State of Washington.)

the slope the women sat and made scornful sounds like seagulls. Men have trouble because they do not listen to any words but their own.

An old man called down the beach and one of the younger squaws ran to a log shelter and came to the canoe, dragging behind her a great stone wrapped in a kelp net. Aktenta grunted his approval and with the old men helping, he wrapped the line of it around the high, curving prow of the cedar canoe.

It was steadied in the surf again and the six Makahs took it out the third time with all their skill and strength. Now the two paddlers had it riding the next wave. The bow rose like a smoke spirit but then fell solidly and in the stern Ak-tenta held it into the weather. With long deft strokes of the paddles the craft rode the swells out toward the Big Point. The stone weight was untied from the bow and carried in the canoe.

In an hour the two were safely out beyond the shoal rocks to where they could drift and see two of the other canoes being launched and on their way. Ak-ten-ta's boatman baited the hooks with herring and threw the lines and floats into the sea. It was raining now and perhaps the wind would lessen. There were plenty of fish here and the people, hungry for the sweet, white halibut flesh, would be satisfied.

There were plenty of fish here and in every river mouth and bay on the North Pacific coast. The Rogue River Indians of Oregon lived on the silver hordes as did the coastal tribes north. Halibut, salmon, gray and black cod and whales abounded in the cold waters and catching them was a tribal challenge as well as personal triumph. The best fisherman of a village was a man of prestige and at the same time a target for ambitious young bucks.

"The hooks of the tribes in Southeastern Alaska," wrote William F. Thompson and Norman L. Freeman in History of the Pacific Coast Fishery: Report of the International Fisheries Commission: 1930, "were large and made of wood, two pieces being lashed together at an angle of about 15 degrees. They were sometimes much carved. To one of these pieces the line was attached and at the end of the other a barb was lashed firmly by means of strong fibers. Another type of hook characteristic of the Cape Flattery Indians of Washington was made of splints from the hemlock knots, steamed inside the bulb of the giant kelp, nereocystus, shaped as desired and allowed to cool. The barb was of bone, lashed with strips either of spruce cut thin like a ribbon, or the bark of the wild cherry. A hook in the possession of the writer is of iron shaped in the typical Indian fashion. The bait was lashed back of the barb by fibers made of the sinews of animals, such as the whale. As the halibut mouth is vertical, it took the peculiarly shaped hook readily and the upper part, to which the line is attached operated as a spring, to hold the barb in the flesh.

"The lines were made of twisted fiber of the cedar, of animal sinews or intestines, or of the giant kelp. The kelp lines were made by bleaching the kelp stems in fresh water, partially drying them in smoke, then stretching them repeatedly until they were the diameter of cod lines. They were brittle when dry but exceedingly strong when wet. The twisted fiber or sinew lines were beautifully made by the squaws and had a uniform diameter and great strength. A line was made as long as 80 or 100 fathoms, but this length was seldom used unless the black cod was fished for, as the latter was taken in greater depths.

"In use the line was attached to a stone sinker with the hook close to it and apparently often, if not usually, suspended just off the bottom. At the other end of the line was attached a buoy made of bladders or skin and to it a float or a flag by which the strike of the halibut was signalled to the watching Indians. It was said that a cance with two men could watch 10 or 15 such lines,

but if a larger canoe with more men was used, fishing was over the side. Fishing was commonly done in 10 to 20 fathoms of water, usually close to shore, but in the case of the Neah Bay Indians most often 15 or 20 miles west from Tatoosh Island, hence well out to sea.

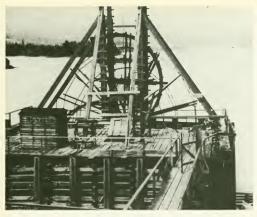
"Lord describes the landing of a very large fish by two Indians using spears of great length (60 feet), to the ends of which barbed heads were attached as needed. When the great fish was brought near the surface a head having a line and bladder buoy was thrust into it, an operation which was repeated until the fish was unable to sound, when it was towed ashore and killed.

"The wooden hook, however, was said usually to drown the halibut by preventing the closure of its mouth, leaving it without power to force the water over the gills. If this did not happen, the fish was clubbed before being taken into the canoes, and if necessary, two canoes could fish together. In fact, there is no doubt but that the Indians were entirely capable of carrying on successfully a halibut fishery sufficient to satisfy their wants. Catches per day of 100 fish to a canoe are recorded."

The white men lost no time in getting their share of the halibut's delicate flesh. They promptly



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FISH WHEEL TRAP for catching calmon in the Columbia River, a method banned in the State of Washington. The fish were fed to the wheel by underwater fences, caught in scoop buckets an d dumped on a platform where, still alive, they were tossed into a trap and brailed out as needed by the canneries. (University of Washington Library.)

started fishing, first from open boats propelled by sails and oars, later from small sailing sloops, manned with a crew of five men, and using two dories.

The first commercial halibut fishing was for local trade only. An attempt was made, around 1870, to ship fresh halibut from Puget Sound to San Francisco in "pounded" ice, via sailing schooner; other attempts were made from time to time, all of which were unsuccessful.

Commercial halibut fishing came into its own with the coning of the railroad. The first rail shipment of fresh halibut East, was from Tacoma, Wash., in 1888. It came from the load of the halibut schooner Oscar and Hattie, which had been caught on the banks off Cape Flattery. The railroad had no refrigerated cars in those days and the halibut was not reiced under way: the load came to Chicago in a somewhat less than first-class condition.

Other shipments followed however and little by little the industry gained momentum. By 1895 the Gloucester, Mass., fishing industry complained bitterly about "competition from the West".

Several sealing vessels, mostly schooners of the Gloucester type, took part in the halibut fishery, some as part time, others as full time fishermen: The Zella May, Borealis, Carlotta G. Cox, Oscar

and Hattie, Edward E. Webster, Mollie Adams. Able vessels all—but not always able to negotiate the waters of Straits of Juan de Fuca, where the winds were fickle at times. Towing in to port was costly in time and money—power was what was needed, independent power.

Then came the steamers, in the early 90s, heralding a new era in the halibut industry. Among pioneer vessels were the steamers Eliza Edwards, Iona Velos.

Steamers New England and Edith—the first especially rigged for halibut fishing—joined the fleet in 1898; they proved successful and the halibut fishery grew fast. More steamers joined the fleet: San Juan, Grant, Chicago, Starr, Roman, Weiding Brothers, Kingfisher. The Zapora of Tacoma, was the first to be built especially as a halibut fisherman.

The actual fishing—setting and hauling of the gear—was done from dories, the lines at first hauled by hand, later by means of hand-cranked gurdies. The fish were transferred from dory to deck of the steamer by hoisting them, four or five at a time, by means of straps around their tails—a slow and cumbersome procedure by which much valuable time was lots. This was remedied when Capt. Joyce, of the new steamer Kingfisher, hit upon the idea of spreading a cargo net in the waist of the dory before starting the hauling of



ESQUIMAULT PRIMITIVE Woods Landing, Constance Cove, Esquimault, B. C. Photo from the album of Surgeon Lieutenant J. C. Eastcott of H. M. S. Reindeer, 1867. (City Archives, Vancouver, B. C.)



STAFF OF LIFE — Fraser River Indians smoking sockeye salmon. (Dept. of Fisheries, State of Washington.)



INDIAN SPEAR FISHING for chinook salmon in the Columbia River. (Washington Historical Society.)

the gear. Now the halibut was thrown into the net when unhooked, the whole catch lifted on board the steamer by help of the winch.

Dory fishing was hard work and hazardous. Also it was inefficient because it could be done only in reasonably calm weather. The first attempt at a more efficient method was made by the B. C. steamer James Carruthers, in 1913.

This new method was called "long lining." The gear was set and hauled from the steamer itself, without the use of dories. Some of the more progressive fishermen could see the advantages of the new method; they put their dories ashore for good and adopted the long lining system of fishing. Still, many years went by before the long

liner fully replaced the dory. Dory fishing was prohibited by law around 1930.

The mechanically driven gurdy had been imported from Norway around 1910 but no one had thought it a very practical gadget. Now it came into its own and soon every long liner had a motor-driven gurdy on its deck.

The system of payment was changed eventually from the two-bits per fish to one cent per pound. Still, many fishermen were less than satisfied. They wanted something... they were not sure what at the time. When they got it, they knew— independence. It was this desire for a kind of freedom that gave birth to the independently owned halibut schooner and to the halibut



INDIAN HAIBUT HOOKS —"The halibut hook is a peculiarly shaped instrument and is made of splints from hemlock knots bent in a form somewhat resembling an ox bew," wrote James G. Swan in his book, "Indians Of Cape Flattery," "A bar bande of a piece of bone is firmly lashed to the lower side of the hook with slips of spruce cut thin like a ribbon or with strips of bark of the wild cherry," (International Pacific Halibut Commission.)





INDIAN HALIBUT LINE (left) made of kelp. Right, Indian gear complete with hook, line and float. (Both International Pacific Halibut Commission.)



WOODEN FLOATS (right) used in Indian halibut fishing. (International Pacific Halibut Commission.)



INDIAN BARBECUE on grounds of University of Washington, September 1883. (University of Washington Library.)

fleet of today.

As local halibut banks were depleted, new fishing grounds were sought along the coast of British Columbia, Alaska and in the Gulf of Alaska itself. Soon the mighty Gulf became the working area of the halibut fleet, and what had been hard and hazardous work of deep sea fishing became even more hard, more hazardous. Fishing was done on a year around basis, winter as well as summer, and winter fishing in the Gulf of Alaska entailed additional hardships and dangers, of which being "iced down" was the most dreaded.

But things were not just right in certain other respects. The fisherman received no wages and so had no fixed income. His pay came from the fish itself—one or one and a half cents per pound. The real bone of contention was that the price was set by the company or the owner, without the fisherman having a voice in the matter. Then on some ships the "grub" was none too good-and scarce; the crew's quarters, the fo'c'sle, often left much to be desired; again fishermen seeking a berth fell, all too often, prey to the shoreside "crimps." All in all, there were in the deep sea fishing fleet a number of things which could bear some improvement.

Came the day when the rough and rugged men of the deep sea fishing fleet realized that something had to be done if ever they were to improve their lot. Organization was the only way, said some of the more progressive ones and several attempts were also made, over a period of three or four years, to form a union.

Finally, in the year of 1912, the men "before the mast" got together and established their own organization, the Deep Sea Fishermen's Union of the Pacific. The newborn organization had the luck and good sense to elect as its leader one Peter Gill, an honest and forthright disciple of "Saint Andrew the Sailor"—Andrew Furuseth—the able and incorruptible organizer of the Pacific Coast's sailor men.

Among the aims and pledges of the new organization were: "... to receive a fair and just remuneration for his labor, and to gain sufficient leisure for mental cultivation and physical recreation": . . . the right to engage without the interference of crimps or other parties not directly interested; . . . to receive healthy and sufficient food, and proper forecastles in which to rest; . . . to use our influence individually and collectively for the purpose of maintaining and



INDIAN SALMON TEMPLE on west coast of Vancouver Island about 1900. Photo is from album of Rev. Chas. M. Tate, pioneer missionary to Indians. (City Archives, Vancouver, B. C.)

developing skill in seamanship and effecting a change in the Maritime Law of the United States and Canada, so as to render it more equitable and to make it an aid instead of a hindrance to the development of a Merchant Marine and a body of American fishermen,". . to regulate and conduct as a Union and as individuals so as to make fishing what it rightfully is—an honorable and useful calling."

Two years later, in 1914, the skipper-owners of the new and swiftly growing schooner fleet formed their organization, the Fishing Vessel Owner's Association, with Capt. M. W. Keating as its President; Albert Linvog, Vice President; E. Wing, Secretary. This organization, also, adopted a rather ambitious program: "The objects and purposes for which this Corporation is formed is to promote the interests, encourage the cooperation and facilitate the organization of the owners of fishing vessels on the Pacific Coast for their mutual benefit . . . to promote the further and more perfect charting of the waters of Puget Sound and Alaska, the establishing of lighthouses, life saving stations and other improvements to the greater safety in navigation . . . to promote efficiency in the construction and equipment of fishing vessels . . . to investigate causes of disasters with the view to preventing repetition thereof . . . to collect data looking to discovery and location of fishing grounds . . ."

In the young fishing industry of the Pacific Coast men of a great many nationalities helped in the harvesting of the "silver from the sea". The men who manned the fishing vesels were as cosmopolitan a group as could be found anywhere in the United States.

Still, men of certain nationalities tended to take a special interest in-or show a certain aptitude for-certain kinds of fishing. On the Columbia River, the Finns were known as the "kingpins" of the gillnet fishery; on Puget Sound and South Eastern Alaska, the Slavs took a distinct lead in the business of salmon seining and soon became the acknowledged "highliners". In the deep sea halibut fishery immigrants from Norway played the leading role, soon dominating the fishery completely. More than 95% of the halibut fishermen were Norwegians. Among the skipper-owners the percentage was even higher-up to 99%. The district of Helgeland, in Northern Norway, was at one time particularly well represented in the halibut fleet-so much so that it caused a certain old skipper, a well known wit, to quip: "I am not so sure that I know just where that there Helgeland is located but I do know that it produced a flock of damn' good fishermen!"

HEADS OR TAILS . . .

the money still paid for fish

It was a canner's world when some fifty years ago British Columbia Indians had to take Fish Money in payment of the salmon they caught. The coins were not legal tender but they were goodwhen the Indians spent it at the company store.

It is all part of North Pacific fishing history, the practice of paying the Indians with private money. This was in the days when commercial species of salmon swarmed in from the sea in such vast numbers they literally choked the creeks and rivers. It was also the days of political patronage.

If a salmon canner knew his men in high office and took proper care of them, he was awarded what was known as "Closed Water Rights". This meant that only fishermen in his employ could take salmon in a designated sea area and this might extend a hundred miles in any direction. Some cannery owners, not satisfied with even

this clear channel to prosperity, set up stores at the plants at which Indian fishermen could buy anything from purple yard goods to "smelly water", officially known as kerosene. To make sure that the Haidas did not buy these anywhere else the bosses paid them in tin-plated coins of their own minting. This worked fine, coming and going. The canners made profit on the canned fish and a lot more on the over-priced store goods.

Each coin, measuring an inch in diameter, paid for the delivery of fifty salmon. Its value, probably depending upon the canners' whims or greed, ranged from \$1 or \$2.50. The exact worth, however, made little difference for in taking the coins the Indian was bound to the business philosophy of-"Heads you win, tails I lose."





HALIBUT HOUSE in the Indian village of Saxman, near Ketchi-kan, Alaska. (International Pa-cific Halibut Commission.)

TO FISH FOR A LIVING

by A. K. LARSSEN

So, says the skipper to the young sprat, you want to be a fisherman. Do you know what that means? Why yes, of course, you do. Youth knows everything. To be a fisherman means living a wild, free life on the sea, on the edge of adventure, out beyond social restrictions where you can spit where you want to and run lots of risks and get thrills no man on land could possibly ever have. It's making a big haul in a short, tough time and having all winter to spend the money. To be a fisherman, says this youngster, is living.

Yes, it's living all right. The old timer sighs at the aeger brashness of youth which insists on setting a one-way course. And then he cannot speak for a minute or so but pulls at the strands of net twine until he can think of something to tell this bubbling young mind, something good, something

helpful.

Yes, son, you're right. Fishing is living. It's all that and it's no more but in between there's quite a bit. To fish for a living means to catch fish and sell it to a wholesale dealer, who in turn sells it to a retailer, who in turn sells it to the person who wants to eat it. This is "Commercial Fishing" and it is an old, old trade. So old, in fact, that its beginning is lost, buried deep in the heavy fog of the distant past. Now we do not know the very beginning. But we do know that commercial fishing was an old and well established trade some 2000 years ago, when one Simon known among his fellows as "The Big Fisherman" and to history as "St. Peter, the Rock" . . . operated a small fleet of fishing vessels on the sea of Galilee.

Simon . . . or Peter . . . used nets in his fishing operations. That indicates that fishing was an old trade already in that far-away day. For nets are

THE HALIBUT FISHERMAN cannot afford to slow down even when seas get to be a little on the rough side. (International Pacific Halibut Commission.)





DORY OVER THE SIDE Winch operator tightened falls which ran through blocks on main mast as men fore and aft of dory swing it out. (International Pacific Halibut Commission.)

still pretty efficient gear and are used in many forms and in many fisheries even today. That net has been adapted to many kinds of fishing, to various new methods, and has taken many different forms and shapes. But the principle of the net... that "four bars make a mesh" ... is still the same as it was 2000 years ago.

When we see how little the fishnet has changed, basically, these last 2000 years, we may with reason assume that a long period of fishing, hundreds . . . perhaps thousands . . . of years must have gone into its original development. Thus we may guess . . although we do not know the exact date . . that "fishing for a living" must have been going on for a long, long time, and that commercial fishing is a very old trade indeed.

It probably started with a few hardy fellows, who liked to do things their own way and not the way the boss wanted. They had to make a living and they could do it better and get more satisfaction out of it if they struck off for themselves.

Through the ages this little band of men grew to a big one, a great multitude of brawny, weatherbeaten men, roaming the seven seas in search of the shiny and elusive riches of the sea . . . fish. The world was their field and they harvested it hungrily and faithfully. They cast their nets along the sunbaked shores of the tropic seas and dove for pearls on the shallow coral reefs. They fought the Arctic snowstorms and ice packs, hunting the precious fur of the seal, the ivory of the walrus. They braved the swift-running, treacherous rivers in quest of the salmon.

A rough and tough and ready lot they were, as fine a bunch of seamen who ever reefed a sail, tied a bowline or spun a wheel. Think of them as men who laughed at hardships and greeted the dangers of the restless, merciless ocean with a friendly smile or a defiant glare. Fishermen they were and seamen of the highest order.

You can believe it—commercial fishing, especially deep sea fishing, has its good and bad points. The work is hard, often dangerous. A fellow may get hurt, crippled for life, drowned. Hours are long. The eight-hour day is not even a dream because it is an impossibility. Working hours for the



WHO WOULDN'T GRIN? —Fishing is pretty good and the Bristol Bay fishermen are happy about it. (Photo by Neil P. Ortwein, courtesy George Johansen.)

WINTER'S WHITE MANTLE Salmon fleet resting up between seasons. (Courtesy E. E. Murrav.)





WHEN DORIES PARTED THE GEAR steamer acted as tug boat and gave 'em a ride up to other end of string. (Courtesy Olaf Sunde.)

deep sea fisherman . . . "a day's work" . . . may range from sixteen to twenty-two hours out of every twenty-four and many a time he may have to take up to forty-eight hours of hard, back-breaking labor between "sleeps." And these are short—seldom more than three or four hours at a time—and then on deck again to a new, long watch. That kind of thing can wear a man out before his time.

The fisherman's living quarters are raw and bare. The fo'c'sle is his home—his basement, kitchen, living room, dining room, bedroom—and the only place he may truly call his own is his twenty-two inch bunk. The rest of the place he has to share with his shipmates. The deep sea fisherman does not know much of the home life men in most other trades know and love. He may be

away from home for three weeks or three months at a time . . . never knows for how long he will be gone. Probably he spends ten out of every twelve hours away from home. It's sometimes a fact that his youngest offspring forgets what he looks like and refuses of recognize him on his return to port.

Income? Most uncertain. That's like the sea itself in a way. It ebbs and it floods . . . but not with the sea's regularity, mind you. The fisherman gets no wages, no pay on the first and fifteenth. His earnings are directly and proportion ately dependent upon the size of his catch and the price he obtains for it. Both of these factors are mightly undependable. His expenses on the other hand, he can depend upon. He has to "kick in" a certain amount of money in order to get out and try to catch his pay load. And it costs



FIFTEEN TWO - FIFTEEN FOUR— On the run from port to fishing grounds and return, there was time for a friendly game of cribbage in the foc'sle (International Pacific Halibut Com.)

as much to make a poor trip, a poor haul, as it does to make a rich one. Thus it may well happen that the deep sea fisherman comes in from a trip and finds he has lost money instead of earning it ... that he actually owes money for oil, ice, bait and gear used, and gets a bill instead of a pay check. This is called "going in the hole" or "getting a hole bill."

So you see, fishing has its ups and downs. Take one fellow I know. One trip he made just a little over five hundred dollars inside of twenty-four hours. He also knew the day when he worked just as hard, fought wind, weather, a snow storm and tide rips for three weeks—twenty-one solid days—and received a check for three cents. That's right—three little pieces of copper when he cashed the check. Sure enough, the income ebbs and floods.

You hear a lot and read a lot about the romance of deep sea fishing—all the glories of wresting a living from the briny deep. Romance comes into your life under the name of Jones. Maybe there was romance in the billowing sail and drama in



COFFEE ON THE "SWEDE STOVE"
The Bristol Bay sail boat had
no fo'esle, coffee being brewed
on a Primus kerosene burner,
These gillnetters have a guest
aboard, (Courtesy Nels Brastad)



SAFE IN PORT dorymen display a sample of catch. (Courtesy Harold Grotle.)



the ice-covered dory fighting its way toward the safety of the schooner, driven by oaken oars and sound, hard muscles. The men of that day might have had another word for it.

If it was romance it is only a nostalgic memory now. Today's drama is built into the exact and mechanically calculable r.p.m.s of a modern diesel. The deep sea fisherman's work, as hard as it ever was, is much too scientifically efficient to be romantic.

But the fisherman himself may well be said to be romantic in that he is still the inveterate, incurable dreamer he always has been, ever carrying in his heart that cherished dream of the big haul, that big trip, that big season which was bound to find him sooner or later. Rarely if ever did the dream come true. Yet it never died . . . it never dies . . not in the heart of a true, deep sea fisherman. No question about it, he is the last real dreamer left in a tabulated and classified world.

Yes, the fellow is an ingrained individualist who scorns "running with the flock," who shuns regimentation like the plague. He may hear of work done on the "cost plus" basis and he will shrug it off as something utterfu unbelievable. Thus fierre-

ly independent, the deep sea fisherman is Free Enterprise incarnate, an independent producer in the best and fullest sense of the word, producing his salable product directly from its natural sources, wholly without harm to his fellow man.

To do this the fisherman must unite and work in close cooperation with a certain number of his fellows. Together; they form a "crew" and each crew is itself an independent unit. It is also a closely knit cooperative where a group of indedendent men have pooled their time and strength and a certain amount of coin for their mutual good. So the deep sea fisherman is not only a laboring man. He is also a business man in his production.

But this business man has no office, no boss. Each crew or vessel has its skipper, sure enough. But the skipper is himself a fisherman. In fact he is the "top" fisherman of the crew or "gang." He owns the vessel in most cases and commands it. So he becomes the responsible leader, the "head" of the crew or gang. Upon his skill and knowledge of winds and tides and weather and currents and fishing grounds rests the profit or losses of each trip, each fishing season . . . the joint venture into

FLAGFOLES AND BUOY KEGS ON THE READY (bottom left) these two dories are being towed to the spot where the schooner skipper wants them to set their gear. On the camera end of the towline is the schooner Vanuee, owner of dories. (Courtesy Mrs.) Brastad.) Center, dory fishing on a calm day. (Courtesy Mrs.) R. Pedersen) Right, halibut bait looked good to this small mud shark. Fisherman smiles but his catch has wasted time and effort. (Courtesy Mrs.) Brastad.)





which each member of the crew contributes his time, labor and allotted share of the risked money.

The skipper is . . . the skipper.

But he is not the "boss" in the common sense of the word. He may fire a man for just cause—for not doing his work properly. On the other hand a "fisherman before the mast" may quit the boat, pack his sea bag and step ashore at the end of the trip for any reason—or for no reason at all.

Carrying his just share of responsibilities in the joint venture of fishing, the fisherman is on a different and far more equal footing with his skipper than is the laboring man with his boss. Technically, the fisherman—crew members—and the skippers—boat owners—are divided into two groups, each with its own organization. Actually, and for all practical purposes . . . social and practical . . . the two groups melt together. They become one group because the interests of one is so

very close to the interests of the other, because both groups derive their livelihood from the very same source—the fish in the sea.

You can figure on disagreements and even fights between the two groups of fishermen when petty financial interests clash. Fights, yes, but enmity never. Here in the Pacific Northwest there have been a few such fights, either as strikes or as lockouts, in the last five or six decades. To the eternal glory of the fishing fraternity... skippers and fishermen alike... let it be put right on the line that these "professional" fights never resulted in any lasting differences one way or the other, never produced a personal enmity on either side.

Now—want to be a fisherman?

OVERHAULING HALIBUT GEAR is done "going home", underway from the banks. Broken or worn beckets and gangions are replaced, worn spots on groundline cut out, hooks "set" and filed to needle point sharpness, (Photo by A. K. Larssen.)



DRESSING DOWN (Opposite) the day's catch on board halibut steamer. (International Pacific Halibut Commission.)

ROLLER MAN pulls in a halibut. Your guess—a 50 pounder?





SALMON BY HOOK AND HERRING

Seamen on ships entering the wide Columbia River began to see little power boats with tall poles snugged up against the masts or laid from port to starboard rails and crossing high above the decks. Some of the poles were dropped outboard to 40 degrees with lines running from the tips. Some poles had secondary poles lashed to them.

Fishing, of course—for salmon. Why hadn't they thought of it before? The seamen saw the same kind of boats in Barclay Sound on the west coast of Vancouver Island and again in Puget Sound. Then they remembered hearing tales of this kind of hook and line fishing from gas boats around Monterey, California in 1915 and before.



TROLLING BOAT OF OLD TYPE —The Frolic was built in Bellingham, Wash., in 1908. She was 36 feet long, powered by 15 h.p. engine. (Seattle Maritime Historical Society.)

What the sailors saw was the first salmon trollers in Northern California, Oregon, Washington and British Columbia and in the course of years from 1928 on they were to see plenty of them as far north as Prince William Sound in Alaska. They were here to challenge the gill netters and purse seiners in off shore waters. Fishermen had found that Chinook or King salmon as well as silvers could be caught with spoon hooks.

The early trolling boats and equipment were naturally crude and experimental, usually converted gillnetters with gear operated by hand. Then they were increased in size and seaworthiness, built for this specific use. Ranging from 30 to 50 feet, the smaller ones powered by gas en

gines, larger ones by diesel.

In California the boats largely had the Italian style clipper bow. Along the Washington and Oregon coasts the double-ended design was extensively used while farther north the eliptical stern became more general. Railed forecastles with pilot house merged into them was very common, some boats placing the engine room and pilot house aft, fish hold amidships, living quarters forward. At the stern was an open cockpit or trolling hatch.

Two strong poles (twenty to twenty-four feet long, tapering to about one and one-half inches at the extreme top) were hinged at the bottom of the mast, and fitted with lines and pulleys, so that the



KEEPING LINES FREE — Power gurdy on each side of troller controls lines running far out with hooks spaced a few fathoms apart. (Dept. of Pisheries, State of Washington.)

poles when trolling could be let down at an angle, just low enough so as not to dip in the water, as the boat rolled in the swells. When not fishing, the poles were pulled up to stand on each side of the mast. The poles had a line from the top—the outside lines. Then there were two short poles, lashed to the big poles, reaching about twelve feet short of the tops of the big poles. These were the inside lines, and fished deeper than the outside lines, being much more heavily weighted, and so well down, that when hauling a fish on the outside lines, they could not get tangled with the other or under lines.

Trolling boats had four lines out; some six. Weights on the outside lines varied from four to ten pounds, and the lines varied in length, according to the depth one wished the spoon bait to be trolled through the water. The inside lines had sometimes up to thirty or more pounds weighing them down.

There were many styles of trolling spoons, most of which would catch fish, if one could get them to the depth at which the fish happened to be. Like all other fishing, different trollers had different fancies. Some liked a silver finish, some a copper, and some a brass for their spoons—some one pattern and some another. Undoubtedly some

spoons would swim more like a natural fish than others, and therefore catch more fish. A good many men made their own spoons out of thin brass. The main thing was to get the spoon to go through the water on its edge, not lying flat, as a dead fish does.

There were different ways of arranging the trolling gear. It was quite usual to have a fathom of trolling wire fastened to the spoon, with three swivels, or perhaps three or four feet with two swivels, and about three or four fathoms of cutty-hunk, strong linen line, tested to seventy-five pounds; two or three fathoms of light line, heavier than the cuttyhunk, about half the weight of the main weighted line, then the lead weights attached to the strong trolling line; a line of from sixty to one hundred and twenty threads, according to the fisherman's fancy. Some used the Japanese style of leaded line for the inside—a small piece of lead, fitted tight round the line every three or four inches, to about one pound a fathom.

Others used lead weights of from five to ten pounds each. One advantage of the leaded line was the ease in hauling in, but it did not run out as smoothly. There was some advantage in the weight being distributed all the length of the heavy line by making it go straighter down in the

FLYING GARBAGE DETAIL at work on the beach outside this Bristol Bay cannery dock. (Courtesy William Wooton.)





MORE InAN 300 VESSEL SBUILT HERE — One of the first boat yards to specialize in Ishing vessels was Sallard Boat Works, established in fall of 1907 on Shilahole Bay, Seattle, where railroad bridge now crosses. When operation became Sagetad Shipyards it was moved to foot of 20th Ave, N. W. in 1916. Many of the fishing vessels produced here are still proud members of the Northwest fishing fleet. (Courtesy Howard R. Sagetad.)



HE BROUGHT HIS TRADE FROM NORWAY — Sivert E. Sagrad was twenty-friew when he arrived in Seatler fresh from his native Norway in May, 1905. Boat builder by trade, descendant of a long line of boat builders, Sivert opened his shop, Ballard Boat Works, on the shore of Shisholo Bay, Ballard, just four months later. In 1916 the shop was moved to the foot of 20th Avenue N.W. and renamed Sagrad Shipyards.

A pioneer in building vessels especially adapted to the needs of Pacific Northwest's fishing industry, S.E. "Southeast" Sagstad receives credit for more than 300 fishing boats of various sizes, many of which are still serving in the fishing fleet. (Cour-

tesy Howard R. Sagstad.)

water (taking the bow out of it) and so going down to the depth required with a somewhat shorter line.

Boats were known to fish all day, within sight of other boats, some making good catches and some catching absolutely nothing. They may have found out that they were fishing fathoms too deep—their spoons far below the salmon. Or it may have been

they were not fishing deeply enough.

A fisherman could not be idle, if he wanted to be accessful. If he was not finding or getting any fish, he must be continually changing his weights, length of line, and sometimes his spoons. Many people believed there was not much skill required in the trolling game; just put out the lines, and then sit and steer the boat, and watch and trust to



SCHOONER SKANDIA ON THE WAYS at Ballard Boat Works to take her first step in joining the Seattle halibut fleet. The Skandia became one of the best known fishing vessels in the Pacific Northwest. (Courtesy Howard R. Sagstad.)

luck. But fishermen know this will not pay for the gasoline used.

"Salmon trolling is sport, as well as earning a living," stated one early authority. "There is a wonderful thrill in the tell-tale jerking of the poles, when a salmon strikes, and is hooked. And excitement and hard work too, in pulling in the heavily-weighted line, and getting the fighting fish up to the boat. And in the swells, being able to get your gaff into the head of the fish. He must be gaffed in the head, as otherwise, if gaffed in the body, the salmon is spoiled for the market and the buyers won't huy it.

"It is distinctly a sporting proposition; after you get the weighted line in the boat, there is still the fighting salmon on six or seven fathoms (forty feet) of line, the boat is moving forward at the steady trolling speed through the sea, and generally rolling very considerably in the swells, and it is quite strenuous and exciting work, playing the fish until it is tirted enough to be pulled up to the boat within reach of the gaff, and frequently a bitter disappointment when the fish (and it always seems to be the big ones) for some reason, gives an extra spurt; and gets away, by breaking the hold of the hook.

"On some days, when well offshore, six or seven-foot sharks will take the spoon, and what is more, they will sometimes take large salmon, after they are hooked, and while one is hauling them. Occasionally when trolling deeply, large halibut will take the spoon. I have seen a fifty-seven-pound halibut caught with a trolling spoon. Four or five smaller halibut, and many codfish are quite common in a day's trolline.

"The amount of money earned by trolling has often been grossly exaggerated. The outsider always hears about the boats that have made big catches and done well, but seldom hears about the many that have done nothing. In good seasons, a good many boats will make as high as \$2,000, and others will make very little, a few hundred, but most make enough to keep themselves, and their families very comfortably, until the next season comes around. I know one man who has averaged two thousand each year, for about seven years. The highest eatch I know of for certain, in a given time, was a Japanese fisherman, who made one hundred dollars a day, for fourteen consecutive days on the banks."



J. O. HANTHORN'S CANNER! (upper left) was located at the exatem end of the city or what was in 1895 familiarly known to the present about a large and the surround that a part his enteroy (upper left) was to wearth vest whethy exhibition to fit it find operating on lower Columbia. Built in 1876, it had a capacity of 1970 one pound and yet day of other large and present and the pound and yet day of the large as to present a part (lower left). Dated and mendel the gilders are pulled such in other set of of the basis (lower left). Could pulled the losts of documenty builty and the lost (All coursey) turniby Builty.

GEM OF THE OCEAN

It is not known who made the first Columbia River gillnet fishing boat, but there is no doubt he hit upon a good idea in practical boat design.

His boat has survived changes for more than a hundred years without losing its basic features the V bottom, duck-like adaptability in any sea, a lot of beam, heavy construction, and a slightly raised bow.

The gillnetter was originally propelled by oars, then by sail, and for more than 50 years by an internal combustion engine whose power is steadily increasing. Yet the sturdy character of the boat

remains essentially unchanged.

The gillnetter has been able to adjust itself to changes in fishing without becoming a new boat. In the early days when fish were plentiful the fisherman loaded up quickly on a short trip from his boat landing. Today the fisherman races from one fishing drift to another in hopeful pursuit of a few salmon. He lays out and takes in his net several times, in contrast to the good old days several times, in contrast to the good old days

when the fisherman put his net out and worked back and forth along the web, picking up fish like a grape grower. The old sailboat has become a cruiser in speed.

The "Columbia River gillnetterlook" has not been lost through borrowing of the design by boatshops in California, British Columbia and Alaska. It has been retained in those seaworthy sports cruisers which have gillnetter-type hulls. It is to be seen in the hulls of many small commercial trolling boats,

Its sturdy features have been reproduced in those hundreds of boats which fishermen them selves have built in home shops on every stream of the Pacific coast. This is a remarkable compliment to the basic soundness of the standard gillnet design. If a fisherman was dissatisfied with it, he would certainly try to make his own boat. Yet nothing of the kind has occurred.

There has been considerable speculation in Astoria about the unknown builder of the first gillnet



INDIAN SWEEPING THE RAPIDS with dip net at Cellilo Falls in Columbia River. (University of Washington Library.)



PURL TWO - KNIT TWO — Columbia River Indian knits gill net in advance of salmon fishing season. (Dept. of Fisheries, State of Washington.)

boat. This subject particularly appealed to the late Phil Cherry, Astoria tugboat operator, marine engineer and marine consultant for Lloyds. He suggested that early ship carpenters had a hand in these first fishing boats. His argument was that these carpenters were about the only people among the pioneers who knew how to build boats. They would all use the ship's utility boat for a model. Cherry believed.

All the ship carpenter had to do, the Astorian theorized, was to make the ship's boat longer and give it extra beam and more depth. The bow and stern had to be so designed as not to foul the laying out and taking in of the net. Adequate space had to be provided for the net and the catch, without making the boat difficult to handle with oars.

The new boats were made as big as two good men could handle in any weather. Heavy losses of life did occur in severe storms. On May 3 and 4, 1880, more than 20 fishermen—the actual number has been a matter of dispute through the years—perished in a southwest gale just after a fish strike which may have been responsible for fishermen taking great risks. But from all accounts, most of the gilnet boats rode out the blow until they cracked up against jetties or piled into the surf. That tragedy didn't change the gillnet boat.

It was this larger gillnet boat which Astoria salmon packers shipped aboard sailing vessels to their Alaska enterprises which were started in 1878. In time this Alaska gillnetter was standardized at a few feet greater length than the lower Columbia River boat.

GEMS OF THE COLUMBIA (left) Some fine specimens of Columbia River salmon and the gillnet that caught them. (Right) Royal chimooks (at left), steelheads (in center) and bluebacks at right and below. The Columbia River blueback (oncortynchus nerka) is the sockeye salmon of Pagies (Courtersy Burnb) Burnon of Pagies (Courtersy Burnon) Burnon of Pagie





The internal combustion engine chugged into the Columbia River and Alaska fisheries in about 1881. For some 20 years only cannery tenders were powered by these slow turning engines. When winds were unfavorable they would tow gillnet boats.

Soon after the turn of the century gasoline engines were installed in a gradually increasing number of gillnet boats on the Columbia River and other Northwest fishing waters, but not in the red salmon fisheries of Alaska. It was not until after World War II that the Alaska power gillnetter replaced the sailing gillnetter.

The first gasoline engines were installed in sailing gillnetters with no changes except removing the centerboard, "plastering" on a shaft log, rigging a "basket" around the propeller and replacing the large sailing boat rudder with a small one.

But even when new power boats were built, the same old sailing boat design was long followed. It took years for the first obvious change—the square stern to develop. Because the power gill-netter could be operated from one place and did not require a clear deck like the sailing gillnetter with its sails and boom, it was possible to provide the crew a pilothouse. But even this change was slow in coming.

With the great increase in the power of the gillnet boat engine, gillnet boat builders have been obliged to make their craft glide without raising their bows. This problem has not been fully solved, but the newer boats made much better use of their new power than did those with the conventional sailing hull.

-Walter Mattila in Portland Oregonian



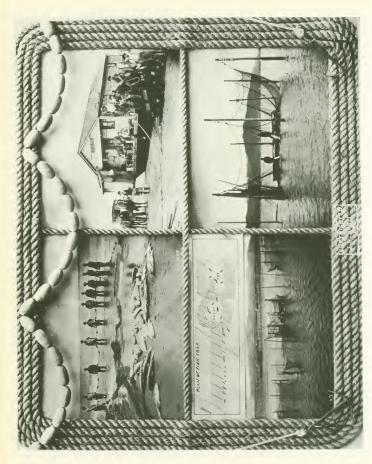
GILINET NEATLY CLEARED DOWN in netroom, this early Columb'a River gillnet boat is leaving her berth at dock. (Courtesy Uno E. Niemi.)

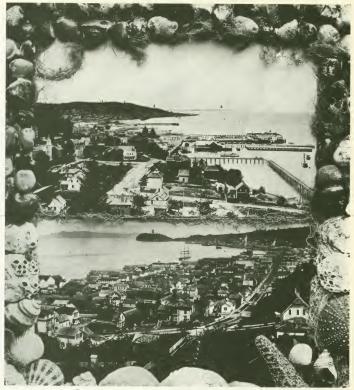
SOMETHING NEW HAS BEEN ADDED — Frank Neimi's new gillnet boat (1911) on the Columbia River boasts a fo'c'sle. (Courtesy Uno E. Niemi)





ROYAL FAMILY Fishermen along the Pacific Coast from Alaska to California may speak of him as "King", "Spring", "Tyee" or "Royal Chimook". In Columbia River he is "Chinook" or "Royal Chimook". And royal he is. The one in foreground measures 48 inches in length and 44 inches in girth, topping scales at 74 pounds.





ASTORIA IN 1895 Two views with appropriate framing by photographer J. H. Bratt. (Courtesy Burnby Bell.)

DAYS OF PLENTY (opposite) Top to bottom · 40 prime salmon in this haul; horse scow was home to man and beast while on the fishing grounds; old type salmon trap, used on Columbia in '90's. (Bratt photos courtesy Burnby Bell.)

THE COLUMBIA TAKES HER TOLL

by WALTER MATTILA

Captain W. L. Harris couldn't keep people along the lower Columbia from calling her Rip Van Winkle. That was her name. He didn't even mind the weird versions of the name coming out of the mouths of the fishing Indians and the recently arrived Swedes and Finns. But he was a bit sensitive to the spoofing the little power vessel got and the scornful tags hung on it.

"'Old Rip', is she?" he snorted on occasion "'Sailor's Toy! Maybe she ain't as purty as a yacht. Maybe she is slow to get steam up and staggers some in a good blow. But she'll prove

herself in this water. You'll see."

That was where the skipper stood, high in pride about the Rip Van Winkle. His snorting, high-stacked, hissing little black demon was one of the first tugs to operate out of booming Baker's Bay, towing fish scows, fishing sailboats, log rafts and whatever Uncle Sam needed for Fort Canby, the North Head lighthouse and weather station.

On general subjects Capt. Harris could joke right along with the best. He joshed fishermen and other tugmen about them being the biggest gamblers in the whole Astoria country with its more than forty saloons and big Squilltown. And why not? They risked their lives and working gear never knowing what black aces weather, Columbia River and Pacific held against them.

He himself was usually ready for bears and storms. He never knew when there would be a bear in his backyard at Canby or in crossing out of Baker's Bay when a southwester would give him a bear hug outside Sand Island. He knew full well the lower river was in the worst possible area for being at the mercy of wind, sea and current.

He kept an eye on all working weather information he could. His storm source was the Morning Oregonian which arrived three times a week in the stormy season, every day in calm summer. It had a whole column of weather stuff on the barometer, precipitation, temperature and wind reports along the telegraph line from San Francisco to Olympia. Very handy source if the storms were considerate enough to follow the telegraph line, didn't knock it out and didn't change nature by the time the information got aboard the Old Rip three days later.

Of course there was the Astorian, the busy little

FOR THE JAVA CUP Once a year busy Columbia River fishermen took a day off from fishing to stage a regatta. The race was won by skillful sailing, winner becoming "king of the fleet". (Courtesy Eric Hauke.)





GIUNETEES ON THE COLUMBIA (top to bottom) Fishermen pulls in his net; night's work finished the tallnet fleet hoists sails and heads for Astoria tents are up, a sure sign fishermen are brewing offer, waiting for the to turn; some canners found it profitable to have receiving scows anchored at strategic points in the river close to fishing grounds so men could sell catch without long sail to canners, (Platts photos courteey Burnly Burnly and the profitable to the profit of t



town's newspaper, but no trains, no telegraph wires, only sternwheelers from Portland and steamers from San Francisco to carry the word. There had been weather news in the paper since it started July 1, 1873, and as a marine expert the editor was ready to tell the Oregonian when its sailing ignorance showed. Yet the only information he had was the observations of the U. S. Army signal corps at North Head. No forecast was made, the reports were a day old and if it was too stormy no reports at all because the mail boat would not deliver them to Astoria.

All the skippers of the new steam tugs, like the Astoria-built Sedalia, the Varuna, Mary Bell, Quickstep agreed with Capt. Harris that too many storms were discovered by tugmen and fishermen right in their front yard on the Columbia bar fishing grounds, perhaps by a ship coming in that had been battered around outside the bar. The skippers also agreed fishermen were using up all their luck in venturing out to sea farther and farther to catch the salmon entering the river—all this to supply the thirty-six canneries on the Lower Columbia and the others thirty miles up river.

The tugmen shook their heads at the fishermen getting bigger nets all the time to be handled by their small sail boats in this rougher water. On the other hand they didn't advise building up the 24/toot boats. With these crafts there wasn't much to do after being caught in a storm on the bar but to ride it out if possible. The government had talked about getting more lights and building to

jetties but these had not appeared.

This was the situation that cold and gusty April of 1880 when the fishermen were on strike. The layoff lasted longer than they had expected and it was realized the only way to make up for lost time was to be out on the bar Sunday, May 2, when the settlement became effective. The opening day came with strong, moist winds from the southwest so that no fishing boats had to be towed out. Tides were ideal—low at 1:45 p. m. permitting a drift over the bar in the ebb and plenty of time riding the flood toward the receiving scows and canneries.

Capt. Harris was in his Rip Van Winkle which lay at Canby where he could see the sailing fleet spread wing and make for the bar. He read the Oregonion's latest weather news. All along the telegraph lines on Friday the barometer had been falling and clouds were thickening. On Thursday

GIUNETIERS PRIZE — Columbia River gillnet fisherman Hjalmar Wilson with 83 pounder - a true king. Said to be the largest salmon caught in the Astoria area. (Col. River Fishermen's Protective Union.)



WITH POWER OF A SORT — With the coming of the gasoline engine a new type of gillnet boat appeared on the river. This new Columbia River craft was built by Wilson Brothers, Astoria, and powered by 5 h.p. Union gas engine. (Courtesy Uno E. Niemi.)

the Columbia at Umatilla had gone up fourteen inches in two hours and the temperature at Wallula was a scorching 81 for that very cold spring. The story from the Siuslaw River on the coast south of the Columbia excited him. The tug Escort had claimed salvage of waterlogged and abandoned sailing schooner Oliva Schultze which appeared to have dragged anchor out of the Siuslaw into deep water in a bad storm. She was carrying stave bolts for salmon tierces bound for the new Oregon calmon packers. From the story Harris could not tell when the dragging had occurred or when the Escort had put her line aboard.

Earlier in the day the captain had seen the schoner Sitka wallowing over the bar. Her skip-per was an old timer in such crossings, a navigator superior to the fishermen recently migrated from San Francisco. With some apprehension he watched the white fleet crowd for the bar, thinking he had never seen so many go so fast. The freshet at Umatilla was giving them an extra boost. It was fourteen miles from Astoria to the uter bar but the boats would be on the fish-rich waters of Chinook Point in no time at all.

Some boats began laying out nets and the 1880 fishing season was underway. Now Capt. Harris

DRAG SEINE on Columbia River being hauled in by two horse teams at each end of net. (Dept. of Fisheries, State of Washington.)





LANDING THE POT - drag seining on the Columbia River. (Photo by A. N. Thorndike, courtesy Mrs. Clara Miles.)

recalled the Oregonian's advance story on this opening and he laughed at the reporter's lively imagination. Some fishermen, said the story, resorted to the bottle after laying out their nets, taking naps and then suddenly finding themselves caught in the hungry breakers, all efforts to save themselves futile.

Harris jumped off the Rib to the dock at Cape Disappointment landing and ran toward the beach. His eyes hadn't been deceiving him—some fishermen were in the water, making for the breakers. One two three boats in the froth. Then another, another and another. One crew of two were riding a keel. There was such a confusion of tortured crafts he could make out no more details except that the whole fleet was reefing sail, many boats bearing for Chinook Beach. The situation must be desperate when sailing fishermen saw safety only in the vicious breakers.

And no steam in the Rip Van Winkle! No other steam tugs were putting out but at once Harris and the fireman started to get steam up. The tide table was checked again. 1:45 was low. The fishermen would not be carried out to sea unless they got in the cross current. But the southwest gale would most certainly carry them on the beach.

Miles farther up river, above Megler, several boats from the cannery of George W. Hume, biggest packer on the river, got in trouble at anchor while waiting for the amazing ebb to slacken. On the Washington shore the fish scow of Nicolas Manuel broke up and its fish buyer, George Ethan, was drowned.

Chris Christiansen, in Hume Boat 26, was bowled over and fouled in the net, the craft thrown into Boat 34. James Hainson was tossed out but managed to crawl back in. A big wave carried the net away, freeing Christiansen who leaped from his boat, which was filling, into Hainson's. On the latter's order he caught the painter and the river snatched the boat off Megler. Both fishermen velled for help until Hainson who had lashed himself to the bow broke down, wailing they were lost. A moment later a breaker threw Christiansen out, almost to the beach. After struggling in the breakers he reached shore. Four



GEE-HAW-AND WATCH THE TIDE Seining with horses in Columbia River. (Courtesy Mrs. Clara Miles.)

hours later he found Hainson on the beach in the bow of his boat, cold and stiff, both nets gone.

Also through the breakers at Megler came James Hansen. He had been in Boat 28 with his brother, Hans. A field of freshet debris had swept down on them, brushing the pair off with their nets into a turmoil of wind, wave and wood. Henry Heinon in Hume Boat 32, had also disappeared and there were innumerable other casualties at this point.

With a full head of steam, Capt. Harris headed into the southwester, swinging around the lower end of Sand Island. Two of the boats, fishermen clinging desperately to the keels, were being tossed on the edge of Peacock surf on the Washington side of the bar which was a white fury. Outside Sand Island the barkentine Webfoot was taut

on her anchor like a fish on a line.

In the gusts Harris feared his Rib Van Winkle would be smothered in the angry sea. He wanted no water down his stack but there were three boats and six fishermen to look out for in a welter of nets weighted heavily with their catches of drift and debris. In every lull he worked the tug closer. He was sure the men could not see him in the toss, spray and chop. Yet he had to keep from running them down and get the exhausted men aboard.

And save them Harris did. In half an hour of struggle he managed to keep from ramming the waterlogged hulks and had six men on the Rip, the three boats in tow

Some boats got safely into Chinook but those who survived the gale from Tongue Point to the sea by going through the breakers suffered a miserable and cold experience in the howling,



HORSE SEINING CAME TO AN END and the old horse scow was pulled ashore at Dahlia, Wash, there to serve as bunk house for a logging crew. (Courtesy Mrs. I. Grant Elliot.)



HAULING THE BEACH SEINE at Tulalip Indian Reservation, Wash. (Dept. of Fisheries, State of Washington.)

blustery night. Those upstream from Chinook converged on McGowan's cannery, more than fifty fishermen being treated and cared for at the McGowan home before the gray dawn broke. Through the night fishermen crowded in at Canby and the Cape landing.

No early word had reached Astoria but the

No early word had reached Astoria but the fact that tenders were not arriving with salmon the next morning foretold the grim story. From the new cannery of Joseph Hume at Knappton

his steam tug <code>Quickstep</code> arrived the next afternoon, her flag at halfmast. The body of the first storm victim to reach Astoria was taken off. He had been picked up near the beach, his waterfilled boat choked by the litter of the storm. The <code>Quickstep</code> towed three boats, two belonging to the Delvin cannery, the third that of the dead fisherman. Her skipper, Capt. Turner, reported an <code>Astoria</code> Fishing Company boat ashore at Chinook. The steam tug <code>Edith</code> reported one Booth



"40 HOMMES ET 8 CHEVAUX?"

Edmund C. Elliot's horse scow on Miller Sands in the Columbia River was important as a "horse barn" and bunkhouse for the men in the days of horse seining. It attracted the attention of many visitors . . some apparently engaging in "horse play." (Courtesy Mrs. J. Grant Elliot.)

and one Badollet boat near the same spot and the mail steamer, General Canby, brought word of four boats and gear on the beach just inside Baker's Bay.

The gusts eased in the early afternoon and those intrepid fishermen who had survived and saved boats and gear and still had nerves intact, put out to the fishing grounds again. Capt. Harris kept the Rip Van Winkle steamed up at the Cape, watching the sails beginning to fret in a sudden comeback of the storm. Off Sand Island the Webfoot was flying a distress signal. And once more the storm was as bad as before and once more fishermen were coming through the breakers. Other tugs stayed in but not Capt. Harris. Into the wrath of the southwester he drove—this time farther out in the river. Seamen on

the Webfoot pointed out two fishermen riding a keel to sea in the late ebb and it was clear the ship could not put a boat over the side to save

them. In came the Rip Van Winkle,

By the time Capt. Harris returned to Canby more than sixty netless, boatless souls, wet, cold and hungry—had arrived. The sight of the tall stacked, hissing little tug and her skipper bringing in two more with their boats warmed them more than all else in that second and last day of the storm of 1880. They found somebody with a hat, took it off and passed it around for contributions to buy a medal for this doughty, brave master of the little old black demon, Old Rip.

Could the hat have been passed in a wider circle there would have been a bigger fund. When the final story appeared in the newspapers three days later, the life toll was given as twenty. Fishermen believed this estimate was low yet knew it would have been far greater without Capt. W. L. Harris, his weather sense and courage.



INDIAN SPEAR FISHING for Chinook salmon in the Columbia River. (Courtesy Washington Historical Society.)

THE EDMUND C. ELUOT HORSE SCOW on its way to its final resting place at Dahlia, Wash. (Courtesy Mrs. J. Grant Elliot, Skamokawa, Wash.)





IOMG WAY TO THE FABM (top to buttom) On Sand Island serining ground hore series being made ready to make a haul; pushing off is accomplished with Ioleg power. Itations it being ground out while seine runs off it seen the haul well under way; haul completed, horses can take rest while fishermen work. (Bratt photos courtesy Burnby Bell.)

... and the

CANS WERE MADE BY HAND

A half-dozen boats were tied up at the dock and more coming in. An Indian stood in one, kneedeep in salmon, swinging them up one by one to the slimy planks which were alive with flies and hornets. The tally card read 211 fish and that was \$10.55 for the Haida fisherman.

In the fish house there was a clatter of China talk, a flash of long knives, the smell of salt and cooked fish. Two flunkies caught the big salmon at the bottom of the chute from the dock, slapping them on the pile at the end of the cutting table. Bare to the waist, muscles alive and squirming, the Chinese butchers brought the knives down on the heads and talls, lopping them off clean at a single stroke. Other quick slashes flipped out the fins, cut a slit down the backbone, split open the bellies and scooped out the entrails. A backhand push and the fish went sliding down the incline to the Indian squaws.

They did the sliming, leaning back against the tanks, their fronts covered with fish blood and gurry. The split-open salmon were coming too fast for them to tie back the black hair that worked out of their braids and they brushed it away leaving smears on their round faces.

A continuing clink-clink was added to the China boy chatter—empty cans bouncing against each other as they pushed along the racks into yellow hands that cut the fish and filled them. Lots of fish, everything going smoothly for once and at the end of the day—fifteen thousand cases of Alaska talls. That was salmon canning in 1890.

And the cans were all hand made. That was done in the winter, the off season. And done by Chinamen usually. Sometimes they worked by the day, sometimes at 80 or 85 cents a case for cutting tin, filling, soldering and boxing the cans ready to ship.

AND EVERY CAN HAND MADE —Part of the 1881 salmon pack of Phoenix Cannery, Steveston. Cans were hand made, by Chinamen or Indians, and dipped in brown laquer dissolved in petroleum naptha to prevent rust. (City Archives, Vancouver, B.C.)





BEFORE THE IRON CHINK — Cleaning department at work in old Astoria, Oregon, salmon cannery. (Courtesy Uno E. Niemi.)

The sheets of tin came in wooden boxes and the Chinamen used big squaring shears—a table with long knife and a guide to make the cuts of even size. Each strip of tin was run through a roller to turn the edges and it was soldered by hand.

When the cans were filled and covered they were racked on trays and cooked in a retort with steam heat. The trays were lifted out and cooked. A white inspector tapped each can with a small wooden hammer. If the sound told him it leaked—and perhaps every can in a dozen was a leaker—it was set aside and sometimes repacked, usually left to spoil. There was lots of fish. The supply never would run out.

All this West Coast salmon canning was started on the Sacramento River where William Hume started fishing in 1852. Hume and two other men from Maine—Perry Woodson and James Booker—had built a cabin on the river bank near Sacramento City and thought the preserving of the salmon they caught was a better gamble than sluicing for gold. They investigated the possibilities and went into business, their little cabin destined to be the first Pacific cannery.

Andrew S. Hapgood, from Augusta, Maine, joined the venture in the spring of 1864. He had been a canner of Maine lobster and had simple equipment. With his machinery and ingenuity, the company canned 2000 cases of salmon the first year.

The cans were painted a fiery red to indicate the "red salmon" contents. The Hume and Hapgood enterprise sold their first season pack at \$5 per dozen cans. Two years later they discovered the wealth of salmon in the Columbia River and canned 6000 cases at Astoria, Orgeon, in 1866.

R. D. Hume, a junior member of the early Sacramento business, later became a leading salmon canner and published in 1893 a pamphlet, "Salmon Of The Pacific Coast," reprinted in part here by courtesy of Hal S. Finch, Seattle.

"To give the reader a clear idea of the salmon industry of the Pacific Coast, and the influence it has had in the development of the Northwest, it will be necessary to give a brief history of the salmon canning business, the advent of which practically begins the salmon fishing era of the Pacific Coast; although prior to that time the taking of salmon had been done to considerable extent to supply the market with fresh fish, and a moderate quantity had been salted. But in comparison with the canning business, the quantity taken for these purposes was of little importance.

"The business of canning salmon on the Pacific Coast was begun in the spring of 1864, at the town of Washington, Yolo County, California, on the banks of the Sacramento River, opposite the foot of K Street, Sacramento City, by the firm of Hapgood, Hume & Co., the firm consisting of Andrew S. Hapgood, George W. and William Hume, with the writer as "sub" under small pay, but with large expectations of a partnership interest, to be realized whenever the business should prove the success anticipated. The pack of the first year amounted to about 2,000 cases, and the trials and difficulties attending their production are almost impossible to realize and describe, after the lapse of twenty-nine years, considering the improved methods of today. The business being in the form of an experiment, and the tools used being of the most primitive character, made the

work necessarily slow and difficult, and the product defective. As I cast my mind backward to those early days of the business, I wonder that it was not given up in despair. At least fifty per cent of the product spoiled at the cannery from the effect of defective work as we had at that time no process for testing for leaks, as at present: consequently all leaky tins were lost; and there were many also in addition to those so imperfectly made that they burst in cooking. To these troubles were added the difficulty of disposing of that part of the product that was good, the article being new to the merchants of San Francisco. They would have nothing to do with it for a long time, and in the interim the firm were very much discouraged and were on the point of breaking up. At that time a few hundred dollars would have purchased all their interests in the business. Just at the darkest time, however, a merchant of San Francisco advanced shipping charges on the lot and found a market at good prices, which awakened a new enthusiasm, and the business went ahead again.

"In the next two years the amount packed per annum was not much increased, on account of the scarcity of salmon in the Sacramento, and in the spring of 1866 William Hume went to the Columbia to see what could be done. Upon his return with favorable reports, G. W. Hume also went to the Columbia, for the purpose of selecting a site and building a cannery and other necessary buildings that should be ready for the reception of the others, who went there some time in October of that year. The point selected by him was at Eagle Cliff in Wahkiakum County, Washington, and part of the cannery now owned and operated there by Wm. Hume is the original building erected by him. During the winter of 1866-67 we put our machines in order and made the nets and cans for the spring season of 1867, at which time we packed 4,000 cases of 48 cans each.

"At the time of our arrival there was but little business done on the Columbia River below Portland, and in fact Portland itself was a small town, all of the business houses being located on Front and First Streets. The business of the lower Columbia River was done at St. Helens, Rainier, Oak Point, Cathlamet and Astoria, which town boasted one small wharf, and that was in a chronic state of dilapidation. The steamboat service was performed by a small side wheel steamer, called the John H. Couch, which made tri-weekly trips between Portland and Astoria with the mails, touching at each of the points mentioned above. Sometimes she would get a schooner to tow, and then



Salmon Labels - 1893



STACKING CANNED SALMON (left), at Spokane Street Terminal, Seattle. (Center) Alaska herring, shipped from Alaska in big barrels, is repacked for retail trade. (Right) On its way to the chicken ranch, this fish meal was stored temporarily at Hanford Street Wharf. (All courtesy Seattle Port Commission.)

the routine was broken, as it would take her two days to get from Astoria to Portland. At this date her passenger list, at times, would consist of a solitary soldier from Fort Stevens, who had been discharged or granted a furlough, and the freight, a case of condemned cartridges from the same place. At this time the business of the lower Columbia cut but a small figure—a wheezy old mill at Astoria and a dilapidated affair of the same kind at each of the other places on the Columbia, except Cathlamet, which had nothing in the way of manufactures, comprised all there was to fur

nish a livelihood for the laborers of that section, except that furnished by the few engaged in salting salmon, and that work was done by Indians.

"In a lapse of ten years, what a change! Portland has by this time become a city of importance, and Astoria has stretched itself along three miles of waterfront; while instead of four small landings along the main Columbia, between Astoria and Portland, the number has increased to more than forty, and instead of one small steamer making triweekly trips, we have four elegant steamers running between these places daily, besides about a



ONLY THE PICTURE LEFT Baranoff Packing Company's cannery, Red Bluff Bay, Alaska. Built to can salmon it was converted to herring plant in 1922. In 1929 the plant burned and was never rerebuilt. (Howard Wakefield.)





dozen running in the fish carrying trade for the use of the canneries, and in place of a product of 4,000 cases of 48 tins each, we have a product of 450,000 cases, of the same number of tins, and we have our wheezy and dilapidated mills running night and day to supply the demand for lumber to build new canneries, and where desolation ruled before we find signs of the greatest activity. We find all trades and profession plunging to get a whack at this new El Dorado, all seeking a fortune to be made from the capture of the scaly beauties. What a mine of wealth, that even all who might plunge might be enriched. But all good things which nature has furnished have a capacity be

yond which they cannot be strained, and the year 1883 brings Columbia its maximum, when the vast quantity of 630,000 cases was reached; and from this time the decline of the salmon product of that wonderful stream. Meanwhile the streams of British Columbia have been developed, until 1882 marks to the credit of that section a product of 255,000 cases, and at the same time Alaska began to make a showing, with a pack of upwards of 20,000 cases, which gradually increased until 1892, when it produced more salmon in cases than the Columbia River, and its output, added to that of British Columbia, the Columbia River and other rivers of Oregon, brings the total pack of the columbia the columbi



FLOATING SALMON CANNERY — La Merced in Kupreanof Harbor, Alaska. (Knut Knutsen.)



THEF BUILT BIG PORT WALTER — Under command of Eigil Buschmann, this crew of men built the cannery at Big Port Walter, Alaska, in the spring of 1917. In foreground, dog at his feet, is Elmar Beyer, pioneer Alaska fish packer and former Norwegian consul at Seattle. On his left is young Haakon Friele, now president of Nakat Packing Corporation. (Courtesy Eigil Buschmann)

1892 up to 1,323,000 cases which represents in value, approximately \$6,549,000.

"What a contrast between the years 1867 and 1892, as regards the industry. At the first date one cannery, with its small product, having great difficulty in obtaining sufficient employees to prosecute the business, while in 1892, in addition to the large number of canneries in British Columbia and on the Columbia River, which were em-

ploying thousands of people, there was not a stream putting into the ocean along the Oregon and California coast, which can be entered even by the lightest draught vessels, that has not one or more canneries located on its banks, forming a nucleus from which radiate the development of other industries; while along the whole coast, from California to Alaska, the business has become an important factor in the development of such sec-



CANNERY RUINS - Libby, McNeil & Libby cannery at Koggiung, Bristol Bay, was burned to the ground in 1915. (Courtesy Nels Brastad.)



tions as have heretofore been considered almost inaccessible, by offering inducements which have sent the pioneers ahead to begin the work of civilization, that in a few years will furnish, in addition to the large number now engaged, homes and employment to a vast number, if rightly fostered, without the stimulating influence of which these sections would remain desolate for centuries.

"The salmon industry of the Pacific Coast has furnished lucrative employment to thousands, and has been both directly and indirectly the means by which very many have made fortunes, and who without its benefits would perhaps find themselves out of employment and lighter in pocket.

"In view of the great importance of this industry, it would seem the imperative duty of all engaged or in anywise interested in the business to protect and preserve, so far as possible, the source from which the essential factor springs, namely, the salmon of the Pacific Coast; and the best efforts of the minds of those who are in any manner familiar with the conditions which are favorable to that end should be turned in that direction. The writer, firmly believing in the principles set forth in this section, although well aware that there is much yet for him to learn regarding the matter, proposes to give to the public as the result of the observations of a lifetime, a series of articles, wherein will be contained a history of the experiments made and experience gained by constant contact with the business in its various forms, hoping thereby not only to add his mite to the general fund of knowledge of the subject, but also to call forth from others such information as may have been

gained by their experience, in order that, ere the streams of our State have been exhausted, and while such information may be of practical use, that the public may receive the benefit.

It is believed the first salmon cannery on Puget Sound was established by James Tarte, in the year of 1882, at Semiahmoo, near the Canadian border. D. R. Lord's cannery was started at Samish, 1887, D. Drysdale's cannery at Semiahmoo, 1891, and E. A. Washan's cannery at Point Roberts, 1892.

The Pacific American Fisheries Co. was organized in the late 90s with a capital of some five million dollars. About 10 years later the "P. A. F." was said to be the "largest salmon cannery in the world," with a productive capacity of 1000 cases of salmon per hour—800 pounds per minute of full operation.

British Columbia's first attempt at salmon canning was on the Fraser River in 1870. It has been described by J. E. Gibbard in his "Early His-

tory of the Fraser Valley":

"... There was formed in 1870 the firm of Alexander Loggie and Company—including Annandale's partner, Alexander Ewen, the pioneer white fisherman of the river—which built at Annieville, about three miles below New Westminster on the south side of the river, the first salmon cannery in the colony. Almost devoid of machinery, and without pressure cooking, the process was crude in the extreme, but it was the beginning of one of British Columbia's major industries."

"The industry grew rapidly during the next few years," says Gordon Taylor in his "Delta's Century of Progress" "Salmon canneries soon



became located all along the Fraser River from New Westminster to the Strait of Georgia, The second cannery in Delta was the B. C. Canning Company plant on Deas Island. The Delta Canning Company started operations in Ladner in 1878 and the B. C. Packing Company opened a cannery in Annieville in the same year.

"Much of the salmon canning process at this time involved hand labor. The cans were hand filled and cooked at 212 degrees F. It was then necessary to pierce the lid of the can with an awl and solder the hole. After soldering the cans were cooked at 240 degrees F. A good deal of the labor was provided by Indians and Chinese.

"Fraser River canning reached a high point in

BIRTH OF A TOWN — Petersburg, Alaka, 1899 (above). Peter Thams Buschmann secured a cannery site at the northern end of Wrangell Narrows, on shore of Mithoff Island, and built a cabin there to validate his claim in 1896. He cleared timber and brush in spare time, built cannery, warehouses, dwellings, shipways, even a small sawmill during the next two years, canning some 65,000 cases of salmon in 1899 season, when above photograph was taken.

Nearly all skilled help, fishermen and tendermen employed were Norwegians and during the 4th of July celebration it was decided the new town be named after Peter Buschmann. Below left, Petersburg, 1925.

Peter Thams Buschmann (below right) emigrated with his wife and eight children from Trondhjem, Norway, to Tacoma in the summer of 1891. There years later he had his first salmon cannery in Alaska at Mink Arm, Boca de Quadra Inlet. That season he canned some 10,000 cases of red salmon and in 1895 built a mild curing station on the shore of Taku Inlet, near mouth of Taku River. (All courtesy Eigil Buschmann.)





JOBS WENT UP IN SMOKE — Fire in the Hidden Inlet cannery totally destroyed the plant. (Courtesy Eigil Buschmann.) Below, Pacific American Fisheries plant at Squaw Harbor, Alaska. (Courtesy Ralph Soberg.)

1913 with a pack of 1,357,000 cases of sockeye. By 1929 the salmon pack had declined to 172,300."

"The year of 1897," writes Thomas Kidd in his History of Lulu Island, "... was a bigrun year for salmon, and a pack of over half a million cases was put up by canneries in Richmond, and many more could have been put up if there had been more canneries to handle them.

This was evidenced by the fact that during that fall many hundreds of thousands of dead salmon were scattered along on the sloping banks of the river, salmon that had been thrown off the wharves because the canneries could not handle all that was caught. This, of course, was nothing new, but owing to low water in the river that fall, and low tides, these fish were not carried out into salt water until late in the fall..."





EARLY IRON CHINK at work in the Pacific American Cannery, South Bellingham, Wash, The first machine was installed at Red Salmon Cannery, Nushagak, on Bristol Bay in 1904. (Courtesy Smith Canning Machines.)

THE IRON CHINK

The China boys in the early canneries were at once a blessing and a curse. The white workers could not and would not make the cans by hand at the wages Chinese would accept for their rice and fish scraps. And many a young cannery hand lost patience with the magpie-voiced Orientals who worked fast but in their own time-honored way, threatening to send the head of John Charlie rolling down the cutting table with the salmon trimmings.

Collectively the Chinese were a constant source of trouble in Astoria, Seattle, Ketchikan and wherever salmon were canned. They worked for "starvation" wages and deprived white men and women of jobs, although only the hungry folks would do the fish cleaning very long. Sometimes the white population did something about it, rioting against the yellow race, running them out of town temporarily.

E. A. Smith's idea was to "do away with Chinamen" through machinery—to build a fish cleaning machine that would do the complete operation mechanically and so cheaply the Chinamen would go home out of sheer disgust.

This resulted in the invention of the greatest device in the history of salmon canning—the Iron Chink. It went into commercial use in the spring of 1904, the first machine being set up at the Red Salmon Canning Company at Nushagak on Bristol Bay. This was later returned to the factory and rebuilt.

A second machine also returned had been tried out at the Northern Fisheries Company, Anacortes, Wash., and after rebuilding was sold to Pacific American Fisheries, South Bellingham, Wash. This firm then purchased machines number 2, 3 and 4. In 1905 Carlisle Packing Company, Lummi Island, Wash., leased an Iron Chink



E. A. "IRON CHINK" SMITH the inventor of the fish cleaning machine that made possible large scale salmon canning. By trade a cook, by nature a humorist, Smith had mechanical ability which led to his devising "an apparatus to do away with Chinamen." (Courtesy Smith Canning Machines.)

IRON CHINK ON STAGE - Moving picture debut of the mechanical marvel that put salmon canneries on a production basis. Invented by E. A. Smith, this early model was exhibited at Seattle's A-Y-P Exposition in 1909. (Courtesy Smith Canning Machines.)

as did Port Townsend, Wash, Bellingham Canning Company, Bellingham, Wash., and I. W. & V. Cook Packing Company of Portland, Ore., for its Blaine, Wash., plant.

E. A. "Iron Chink" Smith, an Ontario Canadian, was thirty-four years old when his invention became a success. He was a fat man with a deepseated and robust sense of humor. Among other occupations, he had been a cook and proprietor of an eating house in Cascade, B. C.

During a period of business dolrums, Smith had time to exercise his joviality. He invited the townspeople to join him in raising money for prizes to be given winners in an athletic competition. He led off with a private contribution of fifty dollars

When the big day came there were some five hundred dollars in the hat out of which Smith held three hundred for the first prize in a fat man's race, in which he entered. The contestants bowled and wheezed down the track, stumbled across the line . . . and then came Smith dragging across last.

"I win!" he shouted.

Howls of protest went up but Smith got his breath, patted his paunch and pointed to the announcement. The fine print-he had given the copy to the printer-read "No man below the weight of 280 pounds will be eligible for the prize.

Smith chuckled heartily. The man who ran in as Number 1 barely tipped the scales at 250. The fact became painfully evident that the one and only fat man to qualify was E. A. Smith, with 320 pounds to his credit. He collected the prize money and "escaped with my life" as he afterward told the story.

Traveling between Portland and Bellingham on the night boat, Smith would invariably select the upper berth at \$1.50 in preference to the lower at \$2. He would then stroll around the deck until his stateroom mate was ready to drop into the lower, then enter, take a firm hold of the upper berth and shake it violently.

"Why do you shake that thing?" his roommate would ask. "Do you expect money to drop out?"

"In a way," the hefty Smith would reply. "But actually these contraptions aren't very strong. I generally break one down sooner or later during the night."

The gentleman in the lower berth would take one look at the Smith bulk and promptly insist they exchange berths. Reluctantly Smith would agree -probably grinning when he got under the covers. He had the lower berth and was fifty cents to the good.







FISH WERE PLENTIFUL BUT PROCESSING SLOW (above left) herring fishing station on Waldron Island, San Juan, Wash. 1897. (Center) View of Sirka harbor, 1894 taken from Baranoff Castle. (Right) Myers Cannery, Seattle, 1895. (All U.S. Bureau of Commercial Fisheries.)

PIONEER FISH CURER — Capt. Ashton Wayman Thomas. With brothers John and Ellery he established his first smokery on the Jim Morrow property on Gunnes Island, of San Juan group, of San Juan County in 1892, was instrumental in establishing the ralmon cannery at Friday Harbor in 1894. He promoted and established several fishery enterprises in Alaska-Port Ashton on Sawmill Bay and Thomas Basin at Ketchkan being named for him. His son, Franklin R. was associated with him in Alaska business. (Gouttesy Franklin R. Thomas.)

PORT WALTER PLANT (below left) Southern Alaska Canning Co.'s salmon cannery, 1917. (Center) Hidden Inlet Cannery built by Eigil Buschmann, 1922. (Both courtesp Eigil Buschmann), Right, Thomas Brothers' smoke house on Waldron Island, San Juan, Wash, in 1885. (U.S. Bureau of Commercial Fisheries.)







Ashton Wayman Thomas was a Puget Sound steamer master from New Brunswick. He entered the fish industry through herring smoking, first with brothers John and Ellery on Guemes Island in the San Juan group, then on Waldron Island. He aroused interest in salmon canning in Friday Harbor and later was associated with Phil Cook in the operation of two canneries at Anacortes—Anacortes Packing Company.

During the rush to the Klondike, Ashton Thomas took a cannery tug and scow to Wrangell and ferried gold seekers to the Stikine River ice fields. When Jim and Will Calvert started San Juan Fishing and Packing Company, he joined brothers John, Ellery and Newton in this venture.

He promoted and established the Juneau Packing Company at Juneau, Alaska, in 1903, canning sardines, smoking and curing all kinds of fish,

operating three fish traps—on Shelter Island, Eagle River and False Point Retreat. Fish were sold to Pacific American Fisheries cannery at Excursion Inlet, some salted and smoked at Juneau.

At this time all cans were made from sheet tin, with sides, tops and bottoms soldered. The entire crew of experienced help were brought from Lubec, Maine, but the competition with Maine sardines was too strong and this operation was liquidated.

In 1909 Thomas went to Ketchikan to supply the New England Fish Company cold storage plant with herring for halibut bait. In 1911 he built what is known as Talbot's Dock to salt herring for China export which E. W. McLean & Co., Vancouver, B. C., exported. He later leased this property to the U. S. Government as a light.







CANNERS CONVENE — On Sept. 4, 1915, the Association of Pacific Fisheries representing the commercial fishing industry on the Pacific Coast, met with the American Fisheries Society for a joint excursion up Mt. Tamalpais, California. Among the more than one hundred persons attending were Henry F. Fortmann, president, and A. K. Tichnor, secretary, of Alsaka Packers' Association; Lee Wakefield of Joep Fish Co. and Wakefield & Co.; P. E. Harris of D. C. Christian Semidt of Semidt & Co., Astoria, Ore.; Robert Forbes, Alaska general superintendent of Pacific American Fisheries; D. W. Branch of Libby, McNell & Libby, Dr. Charles H. Gilbert, professor of zoology, Stanford University; Senator R. S. Farrell of Pillar Rock Packing Co. (Courtesy Howard Wakefield.)

house base, leasing from J. R. Heckman a dock and building on the present Thomas Basin breakwater. A summer operation at Little Port Walter supplied the halibut fleet of New England Fish Co. steamers (then using dories) as well as vessels of Booth, Independent and others.

Thomas also established the cannery at Little Port Walter in 1916 with L. H. Wakefield, canning kippered herring and salmon, scotch curing herring. In 1918 he established the Franklin Packing Company at Port Ashton, scotch curing herring and the next year increased the operation to kipper herring and can salmon, installing a fish reduction plant in 1920.

Two years later he sailed with the four-masted schoner Henry Wilson to Kodiak Island for herring, basing his own operations at Ishut Bay, Afagnak Island. During these latter years his son Franklin R. Thomas was an associate in the various enterprises.

SAMON TRAIN — A full train load, sixteen box cars filled with canned salmon, left New Westminster on Canadian Pacific Railroad for eastern Canada in 1887. Note cordwood on tender. Man in white helmet is W. L. Fagan. (City Archives, Vancouver, B. C.)





FRIDAY HARBOR CANNERY WAS SWIFT SUCCESS

recalls Capt. William P. Thornton in letter to Friday Harbor Journal, June, 1958

"I am writing to thank my many friends in San Juna County for the nice Christmas cards and letters that I received when I returned home from California. I must say there was one letter which mean more to me perhaps than any other. It was Frank Mullis, a very dear old friend. He accuses me of giving him the first job that he ever had outside of San Juan County, and that was working in Port Townsend for the Tibbals Dock. He stayed in that job for seven years and perhaps could have stayed there the rest of his life if he had wanted to.

"Now I am going on from here, taking you

back 60 years when I was a boy in Friday Harbor. My brother-in-law, Ashton Thomas, was the Sheriff of San Juan County at that time. He was also proprietor of the Bay View Hotel, now the San Juan Hotel, and I was helping him there. Sheriff Thomas and his two brothers had a little tract of land on Waldron Island and they were building a boat. I'll say at that time San Juan County and the entire United States was in the grip of a great depression. There was no employment for anybody. The wages for young men at that time were about \$20 a month, and a girll that time were about \$20 a month, and a girll



NAKEEN CANNERY at Bristol Bay in a later day. (Photo by Neil P. Ortwein, courtesy George Johansen.)



PETER BUSCHMANN'S FIRST CANNERY at Boca de Quadra built in 1893. (Courtesy Eigil Buschmann.)

could get \$2 a week if she could find a job. However, San Juan County was rich with fertile lands and large herds of stock, but there was no call to raise much of anything for there was no sale. The people of that day couldn't buy a new suit of clothes or a new dress every time there was a dance. However, they made the best of it.

"Around the first part of April, 1894, one beautiful afternoon a new sailing boat came sailing around Carter Point with brand new sails and fresh paint. This was the little vessel the Thomas boys were building. It wasn't long until she sailed up close to the dock, then it was necessary to get their oars to assist them in getting to the position they desired. There were no gas or steam engines in those days for smaller boats.

"She landed at Sweeney's Dock and it wasn't long before Thomas was aboard and talking to his two brothers regarding their trip down. For the next two days Sheriff Thomas was very busy in taking his friends aboard the new sloop named after my sister, Katie Thomas. After taking some of his friends for a number of short salling trips out into San Juan Channel and then on a Sunday

DRYDOCK AT PRINCE RUPERT, B.C. famous fishing town of northern British Columbia, (Courtesy George Kilby.)





FRASER RIVER CANNERY in 1882. (Provincial Archives, Victoria.)

afternoon Sheriff Thomas and his two brothers and three other men with him at that time left Friday Harbor for a trip to Port Townsend to get her measured for register. They went on down through San Juan Channel and through San Juan Pass and then off into the Straits of Juan de Fuca and across, arriving in Port Townsend about 5:30 on a Monday morning.

"About that time the Str. "Lydia Thompson" was just arriving from a trip through the San Juan Islands at six o'clock. The "Lydia" landed a little ahead of the new little sailing vessel, and as Thomas' boat was coming alongside, three men came running over and were not long in getting into conversation with Sheriff Thomas. Those three men were looking for a fishing place to start

a cannery or something of that sort. In mentioning that to Thomas they couldn't have found a better known man to talk to, and after only a few words Thomas decided to leave his boat and return with those three men who were from Astoria, Oregon. These men were Johnny Devlin, Fred Keen, and Phillip Cook. During the trip from Port Townsend to Argyle in San Juan County it gave Thomas plenty of time to line up the different places for fishing and the conditions in general pertaining to the fishing business.

"At Argyle they were fortunate enough to find Alfred Douglas there with a new buggy and a team of horses who volunteered to drive the three men and Thomas to Friday Harbor, which is about one and one-quarter miles, I would say. A hurry

TROLLER'S END Noyes Island Cannery north of Ketchikan, Alaska, packing red and ocean caught cohoe salmon. (Courtesy New England Fish Company.)





GOOSE BAY PICTORIAL just off Queen Charlotte Sound, B.C. where New England Fish Company cans sockeye salmon from Rivers and Smith's Inlets. (Courtesy New England Fish Company.)

up meeting of the merchants and business men of Friday Harbor was called while Thomas stated the conditions that the men were looking for. The meeting was called in the shortest space of time and everybody came to terms almost immediately.

"The men at that meeting were: the banker J. A. Gould, Joe Sweeney, merchant; Churchill & Nofsgar, of the San Juan Trading Co.; L. B. Carter, merchant; C. L. (Kergy) Carter, former county commissioner; S. E. Hackett, county attorney; C. M. Tucker, county treasurer; Wm. Shultz, superintendent of the Roche Harbor Lime Co.; Mr. E. H. Nash, county clerk; Mr. Hicks and his son-in-law; Dell Hoffman from Shaw Island; the latter two being very important men because they owned the only pile-driver in San Juan County at that time, and they knew where piling could be obtained.

"The meeting was such a success that those three men from Astoria decided right then and there they would build a cannery in Friday Harbor, provided Devlin could get the Chinamen to do that kind of work. It was late in the year for this is what they had to do: They had to build a cannery, get the material to make the cans, install machinery, and have this work done before the 25th of July because that is the time the fish commence to run. The little steamer "Success" was chartered to take Mr. Devlin and Mr. Keen to Anacortes where Mr. Devlin would go to Astoria and Mr. Keen would stop at Seattle to arrange conditions there, while Phillip Cook was left in Friday Harbor to open an office to handle the business of the new cannery.

"Four days later the little steamer "Michigan" came steaming into Friday Harbor with Captain

Howard Buline as master, and Mr. Keen on board as well.

Mr. Devlin has succeded in getting the Chinese and he stayed in Portland and Astoria to take care of the businessend of it there. Two weeks later the steam schooner "Signal" came steaming in Friday Harbor with lumber, tin plate and all kinds of cannery machinery which was required to start the cannery and word went out to all parts of the county for men to go to work that didn't have a job, and it was all speed to get the China house built so the Chinese could land and start work.

"It was like a bolt of thunder into a silent little community and before twenty days has passed there wasn't a man, woman, or child who wanted

to work that didn't have a job.

"The San Juan Trading Company had volunteered to let the newly formed company use their dock at no cost in order to get everything going. Mr. Gould also gave a 30-year lease for enough property on which to build the cannery and China house. From that time on men would arrive from the canning industry in Oregon, such as Harry Cribbs, who was foreman of building the cannery; Iimmy Burke had charge of placing the machinery in the completed cannery. The cannery was built and when the fish started to run on August first of that year, they were all ready for work and at the close of the season they had canned 18,000 cases of salmon. In those days all they canned were sockeyes. The humpbacks, silvers and others were thrown back into the sea.

"This was the start of the bust of the depression, and after the fish business got going in 1895, there were two more canneries started in Anacortes, two more in Blaine, and one in Bellingham."



SALMON FOR UNITED KINGDOM — From Steveston harbor in 1898. Five ships all loading salmon for Europe a steamer with yards, three-masted ship, four-masted barque, two more three-masted ships. (City Archives Vancouver, B. C.)

"ALICE DICKERMAN" GOES TO LONDON

Capt. "Dynamite" Johnny O'Brien, famous sail ing master of the Pacific and South Seas, came to Victoria from San Francisco in 1879 to take command of the windjammer Alice C. Dickerman. He found the ship loaded with canned salmon consigned to London and learned this was the first ship load from the Pacific Coast. The following account of that voyage is taken from his memoirs

written in Seattle in 1930.

"Arriving there I found the Dickerman had a full load of salmon under her hatches and a seven foot deck load of heavy mast spars. The ship was so deep that the two crews that were shipped refused to go—when they saw the ship was so deep. Had ship towed to Royal roads—and the 3d crew came on the tug that was to tow us to sea—arriving at night—it was not an hour before we had anchor tripped and with tug ahead we were on our way to London, England. Off Cape Flattery we had every stitch of canvas set—with a slashing NE wind.

"Before leaving Victoria Mr. Rithet who was agent and a large owner in the cargo offered me five hundred dollars if I made the voyage to London in, or under ninety six days—the famous clipper ship Thermophale time—I told him I would

get there as fast as wind and sails would allow— "We sailed from Victoria the 31" of December, 1879—passed the Equator the 22nd day out rounded the Horn on the forty fifth day—so far we were making a wonderful passage for so deeply laden a vessel and I began to feel that the bonus of five hundred dollars was as good as won.

"On the sixty eighth day we crossed Equator in the Atlantic—celebrated same by giving all hands —a glass of grog and the best feed our larder could

supply.

"Soon after passing the Isle of Fernando Naroni the Brazilian convict settlement—the wind died down, and we were becalmed several days—the Am ship Harvey Mills was within a mile of us lying with most of her sails clewed up to keep them from chafing—her master Captain Mills came on boat the second day. He said be thought we were waterlogged, her holds full of canned salmon and a heavy deck load with her low bulwarks made her look as if she was waterlogged. Capt. Mills had lunch with us and after an hour or so went back to his ship—as he was leaving he said, if the calm keeps on—come on board and have dinner. I thanked him at 4 p. m. had my dinghy lowered and with one man pulled for the



CELEBRATION AT FISHERMEN'S DOCK — "With an elaborate program the new municipal fishermen's dock at Ballard was officially dedicated this afternoon. A fleet of forty power reliefs erafts from Tacoma joined the Seattle boats at the entrance to Salmon Bay and proceeded in martial array to the monogram pipeloting. Three addresses were delivered by claim and common regression to the monogram pipeloting Sound cities.

Three addresses were delivered by a bras band and refreshments served."—Seattle Times Jan. 10, 1914. (Courtesy Fishermen's News.)

Harvey Mills—during our dinner a light air sprung up-and I immediately left for our ship-when about halfway between ships, I heard a hail from Capt. Mills ship, and on looking back saw a large fin cutting the water with terrific speed. A moment later an immense shark sidled up alongside our boat-our sailor turned livid white, unshipped the oar, and as he did so Mr. Shark-a regular man eater-made a snap for it-missed and passed ahead, made a circle and came up under the stern -in the meantime had oars shipped, and if ever a man made speed in a boat that man did-when I was within hailing distance of the ship—I yelled to the mate to run to the galley and grab whatever meat or bread was in sight and throw it overboard, so as to attract the shark from us. Before the mate got anything overboard we were alongside of ships jacob's ladder-our sailor sprung up the side as if the Demons were after him-fortunately he carried the boats painter with him, the boat in the meantime swung away from the ladder-out of my reach. Mr. Shark was some thirty feet off and his old fin was well out of water. I yelled, haul in your painter-he hauled and before the boats stem touched ships side, I jumped, As my foot struck the ship a shout from our crew —look out he's coming—and in another second or two Mr. Shark struck boat and over she went. We did not try to retrieve the oars which floated

away astern—saw no more of the man eater, found boats keel broken.

"A week later sighted the Am ship H. L. Rich ardson, Captain Palmer-she had her signals up, "Short of provisions". We hove to under her quarter, the captain informed me that his ship was out 149 days from "Lopez de Fuero" loaded with guano-that all hands had been living on a biscuit a day for the last ten days-had plenty of fresh water-could I supply him with fresh food. I told him to send his boat alongside and I would divide what stores I had and also let him have what canned salmon he wanted-his mate Mr. Dan Killman came on board, I gave him just half of our provisions-as well as some 15 cases of salmon and some number of sacks of wheat. The salmon and wheat was from the cargo-I received a receipt from the mate—who by the way, is now, and has been master of sailing vessels on the Pacific for over forty years-Captain Dan Killman.

"As soon as the boat left our side—we squared away and it was not many hours before we left the H. L. Richardson hull down—the Captain after his arrival in Southampton, England, came to London and paid me in full for all he received.

"A week before we arrived off the chops of the Engish Channel found our main fresh water tank was salted, the brass cover of pipe leading into tank got loose during the passage—was not



discovered on account of deck-load—all the fresh water we had was about 50 gallons. At once we cut the allowance to one quart a day—2 days a pint—in the meantime we rigged up a contrivance to make a little fresh water—had a five gallon pot—two thirds filled with salt water—kept night and day at the boiling point—from the spout of pot—connected a small hose—this we passed thru the middle of a 10 gallon keg on a downward

angle—the end of the hose leading into a receiver—with the pot kept boiling—the keg being kept full of cold salt water—the steam passing thru hose condensed and—result a tiny flow of drop drop making some four or five gallons of fresh water every 24 hours—after a week we fell in with an English ship—he supplied us with a couple of barrels for which I gave a case of salmon—soon after the long looked for rain came—by this time I got



FISH DELIVERY TRUCK of 1908 used horse power. (Courtesy L. A. Sandstrom Jr.)



SALMON WERE PLENTIFUL AND CHEAP in 1908 at Waterfront Fish Co., in Seattle. Left to right, George Kopsalis, David Levy, August L. Formuzis, Sam Calvo. (Courtesy L. A. Sandstrom Ir.)

a Channel pilot on board off Plymouth. We were out over 100 days and the promised "bonus" was a thing of the past—it was early April—but the Easterly gales were continuous.

"One night while close to the lights of Southampton—blowing hard from the Eastard I called the Pilot—he came on deck—half askep—we had just wore ship around—on the Port tack making fairly good speed when I noticed a vessel close reefed reaching across our bow—I called the Pilot's attention and told him we could not clear her, and that he had better put his helm up and go under her stern—he said Oh, we'll clear her all right—I saw we were in for a collision and shouted "Hard to Port" up with your helm. The Pilot "Hard to Port" up with your helm. The Pilot evidently did not realize the danger of collision or our closeness to passing ship—and as quick action was required I jumped from poop to deck, knocked him over from the wheel, and with our helmsman assistance put the helm hard up—our ships bow just cleared the vessels stern and as we were passing a voice rang out saying "what in H-II are you trying to do"—I did not answer—our pilot had risen from the deck and said my heavens Captain I did not realize she was so close—and begged me not to report the incident—that same night I learned afterward that several pilots were drowned as a result of a collision some twenty miles from where we had such a close call."

PROUD SHIP The St. Paul was one of the big sailing vessels serving Alaska salmon fisheries, bringing crews and equipment north in the spring, returning stateside with canned salmon in fall. (Courtesy Eigil Buschmann.)



SAILS and "SMOKE BOATS"

Dory fishing was a rough business and the dory fisherman was said to be both rough and tough. No one disputes this. He had to be tough in all senses of the word or he would never have survived. But he was proud of his calling and would trade his job for no other, ashore or at sea. "The Doryman", written many years ago by an unknown poet, tells how he felt about it all.

THE DORYMAN

Oh, some can sit in their swivel chairs, 'Midst the cities' rush and rumor, And fret o'er the cares of the world affairs, And the woes of the poor consumer. But I don't envy such gilded ease; Just give me the salt-soaked ocean breeze, The lift and surge of the white-capped seas, And the deck of a halibut schooner.

I want no fuss with the pale faced cuss— The clerk or piano tuner— Who spend their lives in those stifling hives In the struggle for more mazuma. But give me the wind swept ocean's space, Where the "flat ones" flop in the dory's waist, And the salt scud whips in your upturned face, As you pull for the side of your schooner.

Yes, give me a packet that's sound and tight,
And a skipper with guts to boom her,
Up under the heel of the Northern Lights,
Where the grey seas strive to doom her.
Through the grinding ice, where the ground lines
freeze,

Through the howling gales and the pounding seas, For it's into such tranquil spots as these, You must drive with a halibut schooner.

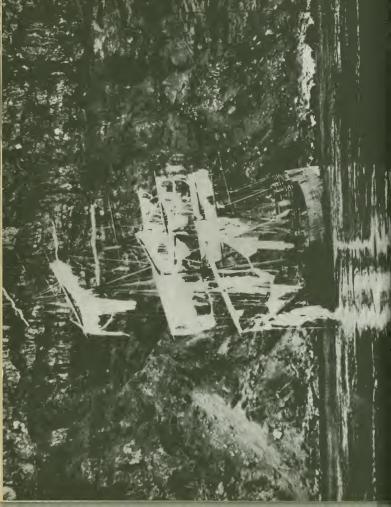
We earn what we get, you may lay to that, Though we sometimes pull a boner; For the weather that's brewed off Yakutat; It can change like a woman's humor. When the "queer thing" flies to the schooner's truck

We slash our gear and dam our luck. But we've time for naught but to cut and duck For safety, aboard the schooner.

And then, when our schooner is safe in port,
And we land in a boisterous humor,
You thank the Gods that your stay is short,
And wish you were leaving sooner.
We're rough and we're "coarse" and we're
"loud." What then!
We're the salt of the earth; we're Dorymen—
And tomorrow night we'll be off again
To the banks, in a halibut schooner.
(Author Not Knoum.)

BAITED GEAR STOWED IN HER WAIST, buoy keg on the ready, dory has just been dropped from steamer. (Courtesy Egil Antonsen.)







HALIBUT SAILING SCHOONER MARY — (International Pacific Halibut Commission.)

THE MARY WAS IN GOOD HANDS

If it is true the greatest qualities a schooner skipper could possess were a sense of thrift, a dry wit and the voice of authority, the Mary was bound for a successful life. For legend has it that her captain was a man excelling in these three sterling virtues.

Electric lights had not yet been introduced into the fishing fleet and being thrifty the Mary's skipper could see no point in burning costly kerosene at night after the day's work on deck had been finished. He simply dropped the anchor, blew out all lights and turned in.

One of the crew men did not like the idea of no anchor light. He muttered something about the dangers of the dark, even going so far as to ask the skipper if he was not scared that a steamer might run into them some dark night. To which the doughty skipper replied: "Now how in Tophet do you think a steamer, in the dark of night, could

manage to find such a little speck as the Mary on the whole Pacific Ocean?"

Nevertheless, one steam tug did manage to find the Mary. It happened at the dawn's early twi light and the tugboat captain just did not see the schooner until he was too close to avoid the collision. He gave full astern right enough and cut his speed to about one half but the tug dealt the Mary a smashing blow on her starboard bow.

The schooner shook and shuddered. Up from her fo'c'sle swarmed sleep-dazed fishermen in various stages of undress. Last of all came the skipper from his stateroom in the pilot house, calmly buttoning his pants. He stepped up on the fo'c'sle head and glanced over the side at the gaping hole. "Is she taking water?" he asked.

The damage was above the water line—no water was found in the pump. The skipper studied the broken planks for a moment or two. "We'ell," he said finally, "maybe we had better pull the anchor and get in to Neah Bay just the same."

Now the tugboat came edging up and her skipper sang out: "Hey you, Cap—do you want me to stand by and see you into Neah Bay?"

The skipper studied him witheringly. "As far as I am concerned—" there was a hint of disgust in his voice—"as far as I am concerned, I would have been better off if I had never seen you!"

SHE SAILED UNDER AN UNIUCKY STAR (opposite) The Star of Falkland met her fate at Akun Head, in Unimak Pass, in May, 1913; The steel ship was built at Port Glasgow in 1892, as the Dambridge. In 1909 she became the Streinbeck under German Illen was setzled in 1917 by the U.S. Government in a Puget Sound In 1912 was setzled to the Company of the Streinbeck under German Illen was setzled in 1917 by the U.S. Government in a Puget Sound to Rapshoe and ship was operated by the U.S. Alaka Pakerre Association, was renamed Star of Felkland. (Seattle Historical Society.)



SERVED IN MAIBUT IRADE—The Edith, a wooden vessel, served in her day as yacht, passenger steamer, hilbut fisherman and freighter. Bulk in San Francisco in 1882, as a yacht for W. C. Ralston, the Edith was 120 long, 24' wide and 9.7' deep. Coming to Puget Sound in 1884 she was operated by Washington Steamboot Company on local runs, a few to Alaska. Refitted as a halibut steamer in 1898 by International Fasheries Company of Taccoma, she became a freighter in 1910, operating out of Seattle, her last owner Star Steamship Company. She was shandoned and condemned in 1924. (Seattle Historical Society



HANBUT SCHOOMER CONSTANCE (top) was wrecked off Cape Duckling, Albaka, in 1919. (Courtey Holge Pederen), (Next) Old saling schooner Edith became gasoline powered in 1906 and (bottom) Decahity, halibut schooner of the old type, propelled by sail—one of the first to be converted to power. (Both courtesy L. A. Sandstrom Jr.)



TWO BITS APIECE

From "Of Boats and Men" by A. K. Larssen

I had heard odds and ends about the dory fishing, in the days when halibut fishing was still young; this seemed like a good chance to learn a little more about that fabulous era, so I said: "All kidding aside, Cap, fishing in the steamer days was a pretty rough game, wasn't it?" Big Hans looked at me, hard. "Yeah; yeah, them were rough days, too goddam rough for a greenhorn to understand! Ask your partner, he can tell you! What you say, Sparky?"

"Yesees yes;" Sparkey grinned, shrugged

"Ye-sees yes;" Sparkey grinned, shrugged his wide shoulder comfortably, "I'll say that I can remember the early days, when we got two bits apiece for the fish, and each dory fished for itself? That was the time that the halibut game was what you might call a rugged game!"

"You mean that you got 25 cents for a halibut, whether it was big or little? And that each dory fished as a separate unit, kept its own fish?" I asked, incredulously.

"Sure, that's just exactly how it was," grinned Sparkey.

"CAFE OMMANEY" says The Coast Pilot, "the western point at the entrance to Chatham Strait, is a remarkable promontory, terminating in Ommaney to the Chatham to the Chatham Ch

King salmon like to feed in the currents around Wooden Island and salmon trollers are there to offer the fish a free meal . . . their last they hope. (Courtesy George Kilby.)



"Yeah, and that was the time you had some dandy fights among the boys, when one dorygang accused another dory-gang of stealing their fish, in the fish-hold," said the skipper.

"But, with such a price, only two bits for a big halibut; how could you make any money?" I

asked.

"Oh, you could do pretty well on small fish, 'specially on fairly shallow water, but if you got on deep water and caught nothing but soakers, then the Lord help you," shrugged Sparkey. "Yeah, and some of them steamer skippers always had a pet or two on board, relatives and such; then he would see to that their dories were dropped on a shallow chicken patch, while the rest of us would be dropped on deep water, where we caught nothing but whales!' Big Hans rubbed his head. 'But then, once in a while we got a chance to fix them bastards, too! Yeah! I remember this here trip, off Cape Ommaney; the son of a bitch of a skipper dropped me right in the gully. Nothing but over-grown soakers there, you know, and hard as hell to haul, wore the skin off my hands the first skate, nothing but red meat all inside my hands. And nothing but goddam soakers, fourfive fish, and the dory was loaded. Well, Sir, it so happened that the king salmon was running good, right there in the tide rip. So I ripped loose every damm' thwart and every fishboard in the dory-broke a couple of the oars, too, and used 'em for floats on my gear! Kept the bight of the gear from sinking too far down-hell, we got a king salmon on every hook that was high enough in the water, and no halibut at all. So we

threw them soakers overboard, and loaded the dory up with kings, couple of times. Got four bits apiece for kings, them days—twice as much as for the halibut! Hell, we made all kinds of money that day—easy hauling, too!"

"Ye-sees, you broke up the furniture in the dory and used it for floats! Dammit, now that's pretty good," Sparkey laughed gleefully. "How

did the skipper like them appels?

"Mad as hell, he got, mad as hell! He fired me when we came back to Seattle. Not that I gave a damm', he was nothing but a piss-ant, that fellow, anyway, always had a pack of uncles and cousins and what have you on board. No damm' good, that, you know that yourself, Sparkey."

EARLY HALIBUT SAILING SCHOONER Jenny F. Decker. (International Pacific Halibut Commission.)





KNICKEEBOCKER (top) and Commonwealth were typical Gloucester sailing schooners which had come around the Horn to participate in Pacific sealing and halibut fishing. Came the mechanical age with its conquering hero, the internal combustion engine, proud old sailers, unable to compete, swallowed their pride to suffer conversion to gasoline power. (Both courtesy George Kilby.)



STORM ON THE BANKS

by A. K. LARSSEN

Reprinted from the author's "OF BOATS AND MEN," published in Oslo, Norway, in 1957

A biting sharp southwest wind hit us square in the face as we stomped up the companion-way and out on deck. It tore the tops off the long-swells and bent them into whitecaps that slapped angrily against the port side of our schooner. Now and again one of the bigger and angrier ones would break over the railing and fill the deck with frothing, greenish-blue scummy water that washed back and forth, back and forth across the deck until it finally found its way out through the scuppers.

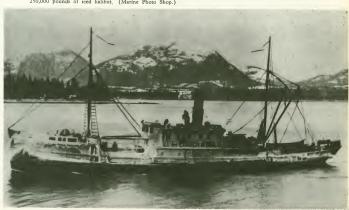
We watched our chances, my partner and I, and made the poop-deck and the shelter of the baiting tent without getting soaked. "Ugh, this is going to be one long, long nightwatch." I groaned, as I struggled into my oilskins. "Twelve hours on deck seems just too much for me to-night!"

"Ha! Don't think of it that way," laughed my partner. "You figure it the other way, that just a

lousy twelve hours from now the cook will have a good hot breakfast waiting for you, and after that you can dive into your nice warm bunk! That's the way you gotta figure!" Sparkey but toned his oilskin coat, and pulled on his gloves. "All set, partner?"

"Yeah," I said, "as set as I can be, I guess. Let's go!" Together we jumped from the poop-deck down to the main deck and scurried forward, Sparkey in the lead. As we ran, a slender, playful whitecap came dancing over the railing and gave Sparkey a big, ice-cold kiss. "So you are after me, you son of a so-and-so!" he howled, shaking his gloved fist at the rolling swells. He took off his sou'wester and wiped his face and neck with its soft lining. "Okay, partner, now the time has come for us to work for our living. I'll bet that the two suckers here, Bill and Knut, are almost willing to go below now. You do the coiling, partner, I'll take the roller." Our long, long, long nightwatch was under way.

FIRST SMOKE BOAT to be built especially for west coast halibut fishing was S. S. Zapora, built in Old Town, Tacoma, in 1904, for International Fish Co. of Tacoma. The Zapora fished twelve dories, could carry pay load of 250,000 pounds of iced halibut, (Marine Photo Shop.)





OUT OF DANGER NOW Frost, spray and a heavily loaded vessel could spell disaster. This time, clad in a heavy coat of ice, halibut steamer Zapora has just docked safely at Ketchikan, Alaska. (Courtesy Egil Antonsen.)

Suddenly the wind died. The whitecaps flattened out and became small islands of grayishwhite froth that gradually dissolved into just plain sea water. But the long, heavy swells did not abate. They rolled on and on, relentlessly, lifting our schooner by her port quarter, pushing and plunging her forward on her face, dipping her starboard bow deep into the water. In the eerie halflight of evening, those mighty rolling mountains of water took on an oily, dark-grayish color. They looked formidable, yet, downright menac-

THE WESTFJORD of the "seine boat" type could be used for halibut fishing as well as seining. Her skipper was Capt. Pete Pederson of Richmond Beach, Wash. (Courtesy Arthur Hvatum.)



ing, as they came rolling in endless successsion from the southwest.

Pete had the pilot house watch, and he handled the boat with care and skill, keeping her "on the gear", which came in easy. Now the skipper came out on deck and forward. He stopped outside the companion-way door. "How's she going, boys, how's she going?"

"Going is lousy, Cap, lousy. No damm' fish on the gear," hollered Sparkey from the roller.

"Oh, I think the going is fine," I said innocently, "now that we got rid of that nasty old wind. Why aren't you in bed, Cap, where you belong?"

Big Hans eyed me scornfully. "Yeah, yeah, you got rid of the wind, all right! Now what does a damm' greenhorn like you know about getting rid of wind? You think it will be sunshine and calm now, hey? Well, fella, you may learn different before the night is over—not that I want to scare you." His great bulk filled the companion-way as he turned and made his way down to the foc'esle.

"Seems as if the skipper thinks we are due for a good blow," I said to my partner as we stopped hauling to change skates.

"I think so myself," said Sparkey. "She has all the earmarks of a gale. Just watch them



HIGH AND DRY — Having served her hitch in the halibut fishery, the Zapora became the property of Alaska Transportation Company and was put on Alaska-Seattle run as freight and passenger carrier. On Feb. 14, 1937 she hit the rocks near shore of Admiralty Island, some 80 miles south of Juneau, Alaska, Passengers and rever eached shore safely, were taken to Juneau by Coast Guard Cutter Tallaponau. Zapora carried load of 10,000 pounds frozen salmon, 53,000 pounds frozen sable fish. Ship and eargo were a total loss. (Marine Photo Shop.)

goonies. When they start washing themselves like that, then look out!"

"Sure looks as if she's going to howl, all right," commented Chris as he bent down to pick up his skate.' Look at those banks out there. They don't look good to me!"

They didn't look good, the fantastic mountains of clouds now piling on top of each other on the southwest horizon. A wall of storm clouds whose core of threatening black faded to a dirty gray around the edges, where it mingled with the pale leaden sky. Behind that wall of cloud, rays of the setting sun kept pushing and stabbing, but they could not pierce that terrific barrier. Instead, they broke and spread in the cloud bank, lending a weird, faintly golden-gray color to its outer rim.

The skipper came back on deck. He stood there, hands in pockets, swaying gently with the roll of the schooner, looking at the gathering storm clouds with impersonal interest. "Yeah, she's going to be a real lulu when she gets going," he said. "Won't be long, either, by the looks of things." He moved

ponderously aft and into the pilot house, where we heard him speak briefly to Pete. Then came the slam of his cabin door, and we knew that the skipper had gone to bed.

"Say, boys," Pete stuck his face out the pilot house window, "you keep on baiting the gear as it comes in, but tie up the buoy lines and make them secure. We won't do any more setting before tomorrow morning, the skipper says."

HALIBUT GEAR CHUTE ON STERN and flagpoles neatly stacked in dory, the Agnes seemed to be planning a trip to the halibut grounds. She was skippered by Capt. B. J. Thompson, Seattle. (Courtesy Arthur Hvatum.)





HOMEWARD BOUND - Some of the crewmen on the schooner Eagle are overhauling halibut gear, taking time out to listen to portable phonograph. (Courtesy Arthur Hvatum.)

"Just as you say, Chief, just as you say," said Sparkey, nodding. And so we hauled our gear and baited it and tied it securely on the poopdeck, while the big, ugly black cloud bank in the southwest grew bigger and blacker and uglier.

The storm struck shortly before midnight, suddenly and with great violence. It hit the schooner with a force that drove her so far over on her starboard side that the sea poured in over the railing, filling the fish checkers, making them into miniature swimming pools where dressed and "round" halibut splashed around helter-skelter, in a crazy dance. At the roller, Sparkey stood in water up to his knees. He stopped the gurdy and looked up towards the pilot house.

"Hold 'er a moment, Sparkey," hollered Pete. "Just hang on. I'll try to get her bow up against the wind. Everybody hang on now till I get her around!"

The storm had hit us squarely broadside. Now

FIRST PORT OF CALL for boats of the "westward" halibut fleet-Ketchikan, Alaska. (Courtesy Nels Brastad.)





CREW OF HALIBUT STEAMER IN-DENDENT, Dec. 26, 1914. (Deep Sea Fishermen's Union.)

we had to try to turn the bow into the wind. As Pete spun the wheel the schooner slowly obeyed the pressure from her propeller and rudder, every ounce of power from her big diesel pushing against the gigantic hand of the wind. Groaning and shaking, she righted herself on her keel and swung her bow into the face of the howling gale. A torrent of water broke over the fo'c'sle as she slammed her stem against an oncoming scum-capped breaker.

"Hang on, boys—watch yourselves. For God's sake don't go overboard!" came the shout from the

pilot house.

Once the Darling had settled down on her new course, facing wind and seas, her deck became a somewhat more livable place, and our work of hauling gear got under way again. Big Hans was in the pilot house again, lending a hand at keeping the schooner 'on the gear'. He stood at the window, regulating the engine controls, while Pete handled the wheel. "How much you got left to haul, Sparkey?" Big Hans bellowed against the storm.

"We are on the last set, two skates to go, besides this one," shouted Sparkey. "We'll get 'er, Cap, don't you worry!" Sparkey's short, stocky figure was, at times, almost hidden from view, what with the heavy stream of water pouring endlessly down from the fo'c'sle head and the spray driving in over the roller. Every now and again in the glare of the roller light I would eatch







BAITING UP halibut gear on schooner's "table." In former days each skate of gear consisted of up to 150 hooks baited with herring until catch came in and gurdy bait was available. (Courtesy International Halibut Commission.)

a glimpse of his face, dripping with salty spray, teeth bared in a confident grin, merry eyes dancing. Sparkey was in his element, fighting a mighty and relentless adversary, waging the grand battle against un-equal odds to save our gear and whatever fish might still be on it. This was his fight, and he gloried in it and did a masterly job.

With each passing minute the wind increased. Huge swells, now mercilessly whipped by the storm, became mountainous breakers, sharp and white-crested. They were hidden in the dark of the pitchy black night, but we could hear their angry hiss when they broke all around us. Now and again one of them would come into view in the small circle of flickering light spreading around the schooner from our decklights. Some broke harmlessly alongside, others climbed over our bow, sending cascades of foaming water down the foc's le head.

"All right, boys," shouted Big Hans, as we fin-

ished hauling, "now rig up a good mark buoy. Use two anchors, and be sure to put a good strong light on that flagpole. We'll chug here till she calms down!" Big Hans eased down on the speed and let the schooner drift backwards before the wind while we got the mark buoy safely overboard. The two anchors sank fast, hit bottom and took hold. The buoy line straightened, sending the buoy keg hissing up against the seas. The flagpole bent before the force of the wind so that it lay almost flat on the water.

"All the gear lashed on the stern?" The skipper's thunderous voice stood him in good stead now. "What about the other buoy lines and kegs?" He watched us with alert interest while we lashed down every loose object on deck. "That's fine, boys, that's fine! Now rig up a life'line. Stretch it between the rigging of the foremast and the rigging of the mainmast, along the port railing. I don't want to see anybody going overboard!"



HALIBUT DORY GOING OVER (top) and below, landing the dory. Photos by Dr. W. F. Thompson. (International Pacific Halibut Commission.)

So we rigged a manila line to grab in case of need, thereby making the journey from poop-deck to fo'c'sle a far less dangerous undertaking. Then, since all work on deck had been done to the skipper's satisfaction, we were free to go below. Chris and Art had finished their twelve hours and would change places with Bill and Knut, while Sparkey and I still had six hours to go, according to the rules. Actually, all of us were free to go below, there being no work left to do on deck.

Funny thing was that no one seemed to be in any hurry to get out of his oilskins. Instead, we gathered in the shelter of the baiting tent, the five of us, listening in a sort of horrified fascination to the howling of the gale.

This storm held a special interest to me. Certainly, I had experienced stronger ones, wilder ones. My native island, back in Norway, was famous—or rather notorious—for its autumn storms. But only once in many years of fishing had I been caught at sea in a stronger gale. That had been two years ago, in the Barentz Sea.

where for a period of some forty hours we had fought a storm so terrible that none of the thirteen men on board had maintained even the smallest shred of hope of ever seeing land again.

The Barentz Sea is feared—and with good reacon—for its storms, but Barentz Sea and the rest of the Arctic regions were a long way off. This was the North Pacific, and it seemed unbelievable that this section of the North Pacific—even when we called it the Gulf of Alaska—could produce storms of this force.

Above the wind we heard the pilot house door slam shut. That would be the skipper heading for the galley and the midnight lunch. Sparkey got up from his perch on the baiting bench and took off his oilskin coat. "Guess we better get our skins off and get forward if we want to get in on the grub. Hell of a long time to breakfast."

Blowing or calm, rolling or not, Bernhard, the cook, took great pride in always serving a meal—and not just an improvised one—on time. So he was doing tonight, but this time we were late, and Bernhard didn't like it one bit. Dancing on tiptoe between stove and table, trying to keep in rhythm with the roll and pitch of the schooner, his smallish, sharp blue eyes fairly snapping, Bernhard more than ever reminded me of a bantam rooster.

"What the hell and damnation is the matter with you fellers? Why don't you come to the table when I ring the bell?"

Art spoke up. "Sorry we are late, cooky. I know it isn't much fun to be cooking in this sea. But it's a pretty nasty night on deck, too. We haven't had too sweet a time, either, you know."





SWAMPED? Yes but the crew of dory was safe on board steamer. (Courtesy Egil Antonsen.)

UP SHE GOES Dory Number 5 is lifted on board and placed in dory nest. (Courtesy Egil Antonsen.)



The cook's evil mood disappeared as snow before a Chinook wind. He wiped sweat from his face. "Well, it's ready for you. Speak up, fellers. What'll you have? Coffee? Chocolate? I've got some dandy lamb chops here. Anybody want a lamb chop? A couple of eggs? It'll take only a minute to fry 'em!"

The gale increased slowly and steadily and screamed with ugly fury through the shrouds and stays. Sharp-crested breakers kept catapulting in over our bow, burying the schooner under tons of frothing water. Old Darling took it in her stride. She pitched deeply in the mountainous seas. She groaned under the loads of water, shaking and shivering, creaking in every joint from keelson to railing.

She shook her proud tall masts against the gale, her range light throwing tiny beams of light—defiantly—into the stormy, black night while the wind, with the voice of a thousand demons, screamed and whistled through her rigging.

Sparkey, his solid torso wedged against the galley table, followed the schooner's movements with appreciative interest. "Man, but she is a honey in rough weather! Just look at her, taking it like the lady she is! Never a false move in her, no siree. Now this is a boat for you!"

"Yeah, the boat is good enough," Big Hans admitted, somewhat reluctantly, "she won't kill anybody, long as she is properly handled." For such is the unwritten law of the fishing fraternity: You must not, ever, brag of your boat, no matter how well she deserves it—although you may agree, reluctantly, when someone else compliments her. But on the other hand, you must defend your boat's virtues—even when there are but few virtues to defend—if someone has the bad manners to say anything disparaging about her, no matter how true it may be.

"Kill anybody? Hell, Cap, I would rather ride out a blow on board old Darling than on any steamer I ever set foot on," vowed Sparkey, "and I've been on plenty of them. Way I see it, a good halibut schooner is hard to beat for a seaboat, and they don't come any better than old Darling!"

"Takes a little blow, once in a while, to make a fellow appreciate a good seaboat," agreed Art.

"Yeah; yeah, the boat is good enough, nothing wrong with her. Well, boys, you can all go to bed, I'll take the watch tonight. You go ahead and turn in. Although it looks like we are going to get plenty of time in the bunks before we get gear in the water again!" Big Hans handed his empty



HALIBUT SCHOONERS at False Pass, Alaska, dock. (Photo G. M. Southward, International Pacific Halibut Com.)

coffee mug to the cook, got up from the table.

"So you don't think that we'll be setting, come daylight?" asked Bill, who would still be in the

'setting gang'.
"Do I think

"Do I think we won't be setting? Now, I know damm' well that we won't be setting, not today, we won't, and probably not tomorrow, either! These southwesters, they are good for three days,

as a rule, in this here part of the country!"

Big Hans hoisted his big frame up the companion way, and disappeared in the inky darkness.

We took his advice, we crawled into our bunks; soon all hands were snoring lustily. But no one would ever know it, because the trumpet blasts in the fo'c'sle were drowned out by the howling of the wind on deek.

HALIBUT ON THE BEACH? — Sometimes halibut fishermen ran short of bait and beach seining was the quickest way to catch a few salmon. Not entirely legal perhaps but necessity could justify it. (International Pacific Halibut Com.)







BAITING UP WHILE ALONGSIDE DOCK — Men are chopping up salmon heads for bait. Center, baiting balibut gear on board long liner Fisherman at right is helping the baiter. Spare hooks hang on line in baiting tent. Right—on board long liner, Roller man's job is to gaff lish, bring it safely in over railing, clear the gangton so it hangs free from the groundline and pick any foreign matter off hooks so they are ready to receive next bait. (All International Pacific Halibut Commission.)



MYSTERY SHIP HELGELAND Built in Ballard in 1913, she was one mew schooler fleet, packing a payload of some 110,000 pounds in her hold. She was also one of the fastest and most modern of the fastest and most modern that he had been supported in the Gulf of Alaska with all hands. No trace was ever floored of the stout old schooler or her wards.)





EARLY "SMOKE BOAT" was the Weiding Bros., halibut steamer. She made her trial trip on March 23, 1909. (Courtesy L. A. Sandstrom $J_{r.}$)

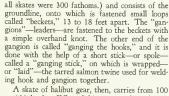


HALIBUT GEAR

Halibut gear is handled in units called "skates." A skate may be 250 fathoms, or 300 fathoms, long (it varies from boat to boat. In the old days



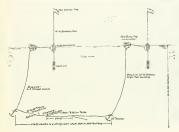
HABBUT GEAR long line type. (Above) Gangion is fastened to becket which is "stuck" in ground line. (Below) gangion is tied to shank of halibut hook with tarred salmon (linen) twine. Act of fastening hook to gangion, called "ganging the hook", is generally done on the run from port to fishing grounds. (At Halibut Commission) line gas in water. (All International Halibut Commission)



A skate of halibut gear, then, carries from 100 to 120 hooks. When fishing, a number of such skates are connected, and called a "string" or a "set." The number of skates in a set varies according to bottom formation, tide, etc., between 3 and 10.

Halibut gear is also called "long line"—as opposite to "hand line." The difference between "dory fishing" and "long-lining" is simply that the "long liner" hauls his gear directly on board the vessel itself, without the use of dories. As for the gear used, it is quite similar—both the dory and the long liner use longline.





PIONEER SCHOONER SKIPPERS left to right, Capt. Egill Ericksen, Capt. Karl Angell and Capt. Olav O. Hvatum. (Courtesy Arthur Hvatum.)





exhoner had slowed down. "Drop the lead" sarg out the scipper and the fisherman on watch hurried over to sounding lead and dropped it over the side. The lead hit bottom, a sample of sand, clay or gravel sticking to butter and the skipper knew more about this chances of finding the halibath he was looking from the mational Facilite Halbut Com.

COME RIGHT ABOARD— Long lining roller man takes in a halibut. (Courtesy Olaf Ingell.)



UP SHE GOESI — Cargo net with day's catch and gear is lifted on board steamer. Next dory will be hoisted up and nested on stern. (Courtesy Berger Edwards.)





STEAMER FLAMINGO unloading fine halbut trip. The first four men, left to right, are unidentified. The next two, armed with agaft hooks and choppers, are the two "headers" named Pursey and Penney. The winch driver (above) is Paul Sather. To right part of the property of

THREE TIMES HIS WEIGHT Young Norman Buschmann with a big one that could have caught the boy. He got it off Waterfall Cannery. (Courtesy Eigil Buschmann.)



DRESSING MISTER HAUBUT — Cleaning was a job for skilled hands. A 12" blade laid the halbut open to extract valuable liver. 5 gallon can is full of these. By its side are steel gaff hook and wooden "hallbut killer". Salmon shown were for bait. (Photo G. M. Southward, International Pacific Halbut Commission.)





CREW OF THE FLAMINGO—She was a B.C. vessel, fishing for New England Fish Company, carried 12 dories and crew of 37 men, was skippered by Capt. Absalon Freeman, center, with necktie and derby hat. (Courtesy George Kilby.)

REAL FISHING MISTER Sweating, straining and smiling - the roller man pulls in another "medium" to be added to the already well-filled checkers on the long-liner's deck. (Courtesy Harold Grotle.)



A LITTLE BIG FOR SUPPER Tender skipper Ed McKay was just trying to hook a cook fish — and didn't know how good he was. This one weighed in at 237 pounds and measured 6 feet 7 inches long. (Courtesy E. E. Murray.)



DAYS OF "SMOKE BOATS" RECALLED

"Days of the 'smoke boats' on the halibut banks, of record catches in pea soup fogs, of roaring gales in the Gulf of Alaska and of experiences of men against the sea, were recalled yesterday by waterfront veterans as two former vessels of the North Pacific fleet, the New England and the San Juan were moored at the yards of steamship breakers waiting to be scrapped.

"The smoke boats, as fishing vessels propelled by steam were called, were years ago crowded off the banks by the more efficient and less expensive diesel-powered schooners which now comprise the

halibut fleet.

"Down at the Deep Sea Fishermen's Union Hall, 86 Seneca Street, veterans of smoke boat days in the North Pacific were telling about experiences of yesteryear in the halibut industry.

"'Do you remember the old *New England?*' asked Harold Grotle. "Sure, I do," said John Hayden, a smile lighting up his face. "I fished in her during her last two years. 1926 and 1927. She

was a fine vessel."

"Well, I fished in the New England in 1915 and 1916 off Kodiak Island and in Hecate Strait," said Grotle. She operated out of Vancouver, B. C., but came to Seattle quite frequently in the old days. She was owned and

operated by the New England Fish Company and had capacity for 220,000 pounds of halibut.

"'And I also was in the old San Juan which fished out of Seattle for the San Juan Fishing & Packing Company, making trips to the banks from 1906 to 1909. Capt. Hans Odsen, now a ship commander in the employ of the Alaska Steamship Company, was her master.'



GLORY OF THE SEA — an old sailing vessel · was converted to a floating cold storage plant and towed into Idaho Inlet, in Icy Strait, Alaska, in 1913. She was the first · and only freezer ship ever to partake in Alaska's halibut fishery. (Courtesy Knut Knutsen.)

HALIBUT STEAMER SAN JUAN alongside San Juan Fish Company's dock, Seattle. (Courtesy Olaf Sunde.)



The New England nearly foundered in a heavy gale in which the British Columbia Packers' steam-ship Onward Ho, was lost with all hands in the winter of 1916. The New England was iced down and the crew kept the vessel afloat by chopping her free with axes. They saw the Onward Ho in a sinking condition during the storm, but were unable to aid her.

"The New England was built in Cramp Shipyards in Camden N. J., in 1897, and came to the Pacific Northwest in 1898. The Spanish-American War was on and the little vessel had a busy time dodging naval vessels on both the Atlantic and Pacific Coasts. As the New England had a decked-over whaleback bow and the appearance of a small gunboat, her master was taking no chances of being interned or delayed on his long voyage by way of the Strati of Magellan.

"After fishing out of Vancouver and making some large catches, the New England was retired as long-lining began to replace dory steamships.



OLD HALIBUT STEAMER STARR was converted to freight and passenger carrier. Owned by Alaska Steamship Company she served as mail boat between Seward and Bristol Bay. (International Pacific Halibut Commission.)



TWENTY-FIVE MEN AND A FAMOUS SHIP — Halibut steamer San Juan, Seattle, 1908. (Courtesy Harold Grotle.)



HALIBUT STEAMER KINGFISHER UNDER WAY (Berger Edwards.)

DORY ALONGSIDE STEAMER and catch is lifted on board in cargo net. The use of cargo nets in the dories had its inception on steamer Kingfisher, Capt. Joyce. (Courtesy Egil Antonsen.)



Her last operations were in 1929, when she made occasional trips to Cook Inlet, Alaska.

"Among the masters who commanded the New England were Capts. A. Freeman, Ben Joyce, John A. Gott, Wilmer Johnson, George Whelan, Herbert Churchill, P. Keough, John Kolseth and M. B. Scott. The vessel carried a crew of thirtyfour men, including twenty-two fishermen.

The San Juan, built in Seattle in 1904, was operated from this port approximately fourteen years by the San Juan Fishing & Packing Company. She made many voyages to the Yakutat Banks and other Alaska fishing grounds. After being retired by the San Juan Company, the vessel was sold to Libby, McNeill & Libby, February 13, 1920, and became a salmon cannery tender.

"There were other 'smoke boats' in the halibut fishing industry besides the New England and the San Juan," said Capt. O. A. Johansen, veteran of the waterfront. "I was master of the wooden steamship Zapora of the International Fisheries of Tacoma five years. She had capacity for between 250,000 and 300,000 pounds of halibut. The Zapora, converted into a Diesel tug, was lost in Southeastern Alaska about two years ago.

"For six years, I was master of the steamship Chicago, and fished the North Pacific all the way from Cape Flattery to Unimak Pass, the entrance to the Bering Sea. The Chicago, a steel vessel, was built in Seattle in 1910 and had capacity of more than 400,000 pounds of halibut. She was a heavy ship for her size and rode deep in the water. She is now towing logs in British Columbia. Other 'smoke boats' were the Independent of the San Juan Company and Weiding Brothers, owned by the Weiding family. They were widely known fishing vessels of other days on the bank."

—The Seattle Times, January 8, 1939. (Courtesy Mrs. Harold Grotle, Seattle.)

COILING GEAR on board long line halibut boat. (International Pacific Halibut Commission.)





CREW OF HALIBUT STEAMER GRANT —A former well-known revenue cutter, the Grant was purchased by San Juan Fishbut use about 1906. She was wrecked on White Rocks Point, Banks Island, Dec. 27, 1911. (Courtesy Deep Sea Fishermen's Union.)

SOME DID NOT COME BACK

It's an old, old story—heard since the Greeks and Phoenicians put sail to craft and went out to conquer. Ships founder, are sunk, smashed to bits on the rocks. Schooners in sail and steam, fishing boats of all kinds have suffered casualties and many crews have been lost. Fishermen will remember many more than these recountered here—if they wish to.

Halibut steamer Onward Ho was on her way to port, carrying a load of some 200,000 pounds of fish in her hold. She disappeared in February, 1915, with all hands—37 men. No trace of her was ever found. No one can say with certainty what happened. The weather was extremely cold and fishermen of that day said the vessel was "iced over," went to her doom from over-weight.

Halibut steamer Columbia, owned by the New England Fish Company and skippered by Capt. Johnston, hit a rock in the North Island reef and



HALIBUT STEAMER FRANCES CUTTING UNDER WAY — Ships such as these sailed with liceaced skippers and mates. On schooners engineers usually served as mates. (International Pacific Halibut Commission.)

HALIBUT STEAMER G. E. FOSTER (Courtesy Olaf Eliasen.)



SCHOONER DOROTHY—With dimensions of 103'x21'x10', she was the largest halibut schooner of her day. Her skipper was O. O. Hyatum. (Courtesy Arthur Hyatum.)





BUILT AT SAGSTAD SHIPYARDS schooner Skandia was famous in the halibut trade

sank within an hour. She was a vessel of some 900 tons and carried a crew of 39 men. All were saved but the vessel was a total loss.

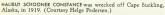
Halibut schooner Ella G. was lost on the south coast of Vancouver Island. Halibut steamer Grant, owned by Seattle's San Juan Fish Company, was wrecked on the White Rocks Point, December 7, 1911. Halibut schoner Melalo, owned and operated by Capt. W. L. Hurley, was lost in December, 1921.

Halibut schooner Alameda sprang a leak and sank in Hecate Straits on September 6, 1919. Capt. Tideman and his crew escaped. Halibut schooner G. R. Hughes, formerly the Rosine, Vancover, B. C., was making her first trip under the

new name when she was driven on the rocks at Secretary Point, Hope Island, B. C., Christmas eve, 1913, and totally destroyed.

Halibut schooner Alice was wrecked off Cape Decision, Alaska in February, 1914. All hands were saved, the ship a complete loss. Halibut schooner Constance was wrecked at Cape Suckling, Alaska, in 1919, and halibut schooner Washington met the the same fate in almost the same spot some three years later.

DISASTER STRUCK halibut schooner Washington when she ran sahore in a heavy storm Nov. 11, 1922, 18 miles east of Cape Suckling, Alaska. All hands got off in the dories and reached shore safely. They set up camp, bull a driftwood shack where they lived for 22 days under severe conditions. Three of the men set out in a dory to summon help, rowed for 50 miles be-fore securing the aid of a gas boat from Wingham Island. The Washington, owned by Oswald Olsen, her skipper, and Erling Olsen, engineer, was a total loss. (Courtesy Helge Pedersen.)









COVERED WITH ICE schooner Skandia seeks in to harbor at Juneau, Alaska. (International Pacific Halibut Commission.)

OLD IRON HALIBUT STEAMER LEFT MEMORIES

The "New England" . . . just ask an old-timer like Martin Dyke about her and he'll tell you that she was a grand little ship that survived many a tough tussle with the elements.

It was on February 28 of 1915 as Martin recalls it, that another halibut schooner, the "Onward Ho", went down with all 37 hands, and was never seen again.

It was bitterly cold weather and the "Onward

Ho" was bound for port with 200,000 pounds of halibut aboard and many a ton of ice on her port side from the flying spray.

Fishermen of that day are convinced she iced up and plunged to the bottom with no survivors Martin was on the "New England" that very night and he was the last to speak to anyone aboard the ill-fated vessel.

But the "New England" was carrying only







ONE OF THE TRUE PIONEER SHIPS in Pacific Northwest halibut fisheries was steamer New England. She came around the Horn from Boston to Vancouver, B. C., in the spring of 1898, entering fishing industry that fall. (The Fisherman, Vancouver, B. C.)

117,000 pounds of halibut and that, plus her skipper's good judgment enabled her to escape from the grip of the sea and ice. She could, the old fisherman estimated, do between 12 and 13 knots.

"We iced up and pretty near went down," Martin recalls. They were off Yakutat in Alaska with a light northeast wind which flung up spray on her starboard side that had the ship listing dangerously.

But she pulled through even though her dories were coated with six feet of ice.

It was the next year that the old "Roman" ran up on a reef off Ketchikan, filled and went down in 200 fathoms, but that was a whole tide after her crew of 37 had got safely ashore. She wasn't even holed, they said.

The "New England" was built on the east coast and came to Vancouver either in 1904 or



ALEUT BARA-BARA or sod hut in Akutan village. (Courtesy Olaf Svenslid.)



ICED UP BUT STEAMING PROUDLY the Canadian Fishing Company's halibut steamer. New England of fish. Iron-hulled she came to of fish. Iron-hulled she came to Vancouver from the East Coast in 1904 and outlasted most schooners in the halibut trade, finishing her career out of Ketchiaan. Crew left to right. Jarvis Fitzgerald, Nels Olsen, Rasport, Walley Company, Comp

1905, Martin recalls. She was made of iron and outlasted all her fellow halibut schooners, making her last trip here in 1930. The schooner was the first Canadian registered bottom to fish for the American New England Company which has since become the Canadian Fishing Company. The "New England" was brought in when regulations came into force making it illegal to operate any but Canadian-registered ships out of Canadian ports in the fishing industry.

Captain Freeman was her first skipper and Captain Michael Scott her last, commanding the ship during her final 10 or 15 years; the latter decade of which she spent out of Ketchikan.

Captain Scott is still living, making his home in San Pedro.

The "New England" carried a crew of 36 men with 12 dories and was powered by a steam engine. Her length overall was in the neighborhood of 125 to 130 feet. Her decks were pitch pine over steel beams,

Wilf Babcock, of Vancouver, owner of the troller "Titanium" was a member of the "New Englands" crew during the last four or five years of her career.

In her latter days, she fished out of Ketchikan during the season but made Vancouver her home port, through some agreement between Canada and the United States under which half her crew had to be Canadian though all the officers were American.

Wilf recalls that the biggest trip she made was 173,000 pounds, which worked out to \$315 share per man. Average trip, however, was around 110,000 pounds. She used to make a round trip of 18 days with 10 days actually spent fishing.



DRESSING DOWNon long liner of seine boat type. (Courtesy Olaf Eliasen.)

Top season that Wilf remembers, though he himself wasn't out that year, was \$2,200 per man. Share was around \$1.68 per man per thousand pounds.

Other big boats operating during those years, in addition to the ones already mentioned, included the "Empire", "Manhattan", "Flamingo", and "Kingfisher." The long season usually went from mid-February to October each year but in the early years, they fished all winter. The "New England" and the others now live

111 the memories of only a few. There are still relatively young men such as Wilf Babcock and old-timers like his father Joe, owner of the "Annie Tuck" and Martin Dyke who recalls her vividly for they sailed and fished the old "New England."

This old warrior did not die or fade away; she was sold for scrap during the war, and the metal from her stout iron hull may well be part of some cargo ship now plying the waters of the Pacific. -from The Fisherman, Vancouver, B. C., December 20, 1955.



NETS IN THE SALT CHUCK

The Bristol Bay gillnetters never had it easy. Even when things were going smoothly there was no end to the work-or vigilance. They spent six days fishing and when they were over, there were the catch-up chores. Sleeping and eating were just something to chink in if there was any time.

The gillnetter slept in his boat under the tented bow and around three in the morning he would be forcing himself out of his blanket roll and getting his fishing partner up. He got his own boots on, lit the Swede stove and had coffee boiling, drink-

ing this eye-opener strong and black.

The boats and gear were owned by the canneries, used by the fishermen at no cost. The men readied the nets before the fishing started and kept them in repair throughout the season. Food and boat supplies were also furnished by the companies but fishermen used their own clothing.

Coming alive under the hot coffee, the two fishermen raised the mast, clamping it tight, stretching the sail and raising it. The canvas was three-cornered and a sprit or small spar could be fastened to the upper leg to put more surface to the wind. The sprit was rigged so that under a sudden burst of wind a sharp yank on a line would free it and loosen the sail.

If the morning breeze was brisk the boat was soon on the fishing grounds in one of the channels of the river mouth. Then the sail came down, enough spread left to keep the boat moving while the gear was being put out. If there was no wind

the men had to use the oars.

Both shackles were thrown out-nets seventyfive fathoms long and twelve feet deep or nine hundred feet of net. A lead line ran along the bottom, cork line along the top, the wooden floats of the latter spaced twenty-five inches apart. The mesh of the net was big enough to let the head of the salmon go through but not his body, the gills caught in the twine strands.

The net might have been out several hours or one but whenever the floats started jerking, the gillnetter knew the net was heavy with fish. The two men pulled it in over the rollers, one on the lead line, one on the cork line, and it was stowed

in the stern, fish and all.







WE PULLA DA NET to makea da mon to buy a bread to getta strength to pulla da net . . ." (Photo by Neil P. Ortwein, courtesy George Johansen.)

The men now picked fish—extricated the salmon from the meshes with fast, practiced hands aided by a small handy hook. The salmon were tossed in the bins and when the net was clean it was set again. If the boat drifted out of the proper channel it was first pulled back.

A load of salmon was two to three thousand fish depending upon their size, weather and distance from the scow. If the tide had turned and the boat could not drift back to the fishing grounds, it might prove better to unload the fish before going back under sail or by rowing.

Alongside the scow the sail was dropped, the tally man on the scow making the line fast. To keep rigging clear of other boats, the sail was released from the boom and put on the forecastle head, boom and sprit lowered. The tallyman gave his signal, fishermen answered they were ready and a fish was pewed on the scow—the pew being a single-tined pitch "fork." All the salmon stowed in the bin allotted to these fishermen were tallied and credited to them.

The boat had to be washed out and then a hot meal was eaten in the scow, the only one of the

SUNSET BRIGHTENS HOPES (opposite) of these Bristol Bay sailors fishing for Nakat Packing Company. (Photo by Neil P. Ortwein, courtesy George Johansen.)



IT'S A CALM EVENING in Bristol Bay and the tender is on her job giving the boats a tow out to the fishing grounds. (Courtesy William Wooton.)



SCOWEGIANS?—The Bristol Bay scows (above) served also as passenger crafts bringing fishermen and cannery workers from steamer to plant. Below left, weather is fine, sail drawing nicely, the crew of the old St. Nicholas can take time off for a smoke and yarm spinning. (Courtesy William Wooten.)
Below right, steam tug Oregon gets free ride from her tow, sailings hip St. Nicholas. (Courtesy William Wooten.)



day. The men had food aboard the boats but work and weather did not allow them much time for more than a hasty snack.

After picking 'up news and gossip, determining from report which river channel was proving to be the best fishing, sail was again set and nets put out in the best spot. One man might now get an hour's sleep, the other remaining on watch to see the boat did not drift on rocks or one of the scows. It might be cold—a fog might be rolling in—and the stove was lighted for warmth or coffee.

It was perhaps midnight before the fishing stopped, or long before. But if it was Saturday, the boat would have to be in before six o'clock. From then to six Monday morning was the "breather" that allowed a portion of the salmon to get up the rivers for spawning and the fishermen to get their dock work done

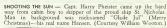
Saturday night and Sunday was for cleaning nets in a chemical bath, hanging them to dry and mending any bad strands. Then hot baths, sleep in shoreside bunks, making repairs to the boats and replenishing supplies—hoping another week could go by without a squall. Bristol Bay gillnetters never had it easy.





RUGGED LADS THESE Bristol Bay gillnet fishermen from Libby, McNeil & Libby cannery at Koggiung, Alaska, summer of 1915. (Courtesy Nels Brastad.)

BIRDSEYE VIEW OF deck of Columbia River Packers' Assn's. ship St. Nicholas on her way to Bristol Bay with fishermen and boats. (Courtesy William Wooten.)









CALM DAY ON THE RIVER and this Britol Bay fisherman is pulling on the oars trying to straighten out his gillnet. Not many fish yet—only one splash in the net, lower foreground. (Courtesy Nels Brastad.)

IT'S THAT WAY IN BRISTOL BAY

Fishing being an ancient industry, it is only natural that certain fishing grounds should have become famous through the years. One of them is Bristol Bay, Alaska.

These waters form the southeastern corner of the Bering Sea and include the area from Cape Newenham to Cape Menshikoff. Of the six salmon rivers in this territory, five are open for commercial fishing: The Nushagak, the Kvichak, the Naknek, the Egegik and the Ugashik rivers. The sixth river, the Togiak, is fished for "personal use" only, by the inhabitants of that watershed.

Bristol Bay's claim to fame rests upon the very solid foundation that from the beginning of commercial salmon fishing in America, it has been the largest producer of red—or sockeye—salmon in the world. This tremendous field has been harvested for some 75 years with varying—but for the most part excellent—results. Yearly catch has reached as high as 24 million salmon and the yield to the salmon canners as much as 30 million dollars in one year. Small wonder then that the name "Bristol Bay" has a magic sound in a fisherman's

ear and is spoken with wonder and respect whenever fishermen get together.

The gillnet is the only legal fishing gear in Bristol Bay. It may be used as a drift net, or as a set net—also called "stake net" or "beach net." Set nets may be used by the local people only, and one must be a resident for not less than two years to operate this in any of the rivers.

From the beginning of commercial fishing in Bristol Bay and for some sixty-odd years thereafter the fishing was done with open boats, using sails and oars as propulsion, the use of motor boats

having been prohibited by law.

The reasons for this prohibition were not quite clear, it seemed. Some said that it was for the sake of conservation, as power boats would be so much more efficient than the sailboats. Others again insisted that motor boats were prohibited at the request of the canning companies, as motors cost big money, and had to be repaired and replaced when worn, whereas Squarehead, Finn and Italian fishermen could be thrown away when worn out, and replaced at no extra cost. Whatever the reason the law was there and had to be obeyed.





SALMON FISHING THE HARD WAY — Left, Bristol Bay fisherman pulling well-filled gillnet by handpower. (Courtesy Ralph Soberg.) Right, with 2,200 sockeye salmon on board fisherman gets tow to tally scow. (Louis Aurdal.)

WITH MAST BENDING under the press of full canvas, this Bristol Bay sail boat is bowling along in a fresh breeze. (Courtesy George Johansen.)



BRISTOL BAY SAIL BOAT under full canvas with sprit raised. Under a fresh breeze (bottom) has dropped sprit, sailing with only the tri-corner. Storms in Bristol Bay are frequent, volent, sudden, the gillnetter's only chance being to "ride her out", net acting as sea anchor. (Courtesy Louis Aurus)





HOMEWARD TOW — At the end of a fishing period weary Bristol Bay fisherman get a tow in to the cannery. (Courtesy E. E. Murray.)

TUG ROOSEVELT IN BRISTOL BAY ICE PACK — The Sturdy Roosevelt had seen ice before she came to the Bay. Bullt at Vernon, Maine, in 1905, she served as Admiral Peary's relief ship during the Peary Polar Expedition in 1908. (Courtesy William Wooton.)



The law prohibiting power boats was changed, finally, and the fishing season of 1951 brought the first power fishing boats to The Bay. They began to take over the field completely and the old sail-boat is seen no more on the rivers of Bristol Bay.

The history of early Bristol Bay fishing is a proud and terrible record of grueling work, privations, sufferings, of heroism and skullduggery, of foresight and initiative. Bristol Bay boasts what is perhaps the most "unravigable navigable" waters in North America, with dangerous sand bars and banks extending miles out to open sea. The tidal difference is the third largest in the world, creating dry land where, only five hours earlier, there was a navigable channel with twenty feet of water. The currents are unusually strong and erratic—storms are frequent and violent. Such are the waters fished by small, open sail boats—a testing



MASTS UP, SAILS SET Bristol Bay gillnetters ready boats for early morning fishing at Pacific American Fisheries cannery dock at Dillingham, Alaska. (Research Dept. Pacific American Fisheries.)

ground that served to divide the "men from the boys."

Even all the men did not survive. The rivers of Bristol Bay took their toll, year after year; boats were capsized, sunk, stuck on a sand bar and broken to pieces by the incoming tide when a sudden storm came up. No statistics have been compiled but it is common knowledge that hundreds of fishermen found their grave in the sands of the wide river mouths.

In the early days transportation to and from the Bristol Bay fishing grounds was by sailing ships, each canning company operating its own fleet of such vessels. The trip from "stateside"—Astoria, Seattle, San Francisco and other ports—often had

ISIAND BELE was built at Ballard in 1892 for owners, Kulldahl Brothers, who used her as a passenger carrier on the Seattle-Whatcom run. She was sold to the Anacornes Packing Company about 1898 and converted to cannery tender. In 1904 her power was removed by successors, Alaska Packers Company, and she was used as Waunegan. Ship was burned at Schiahmas about 1912. (Seattle Historical Society.)





TENT WAS GILINETTER'S FORECASTLE Note method of raising canopy in boat. Many fishermen scorned tents, fishing all season with no protection against weather. (Research Dept. Pacific American Fisheries.)



BIGGEST SALMON PORT IN THE WORLD — Ketchikan as well as important receiving station for halibut and sable fish. New England built its first Alaska plant here. (Courtesy New England Fish Company.)

unpleasant surprises in store for the fishermen—who, during the voyage, also served as sailors. The Gulf of Alaska is known as rather a rough p.ece of water, especially in time of winter and early spring, and the sailing vessels had to take many a lashing from wind and waves before reaching "the Pass" —Unimak Pass, gateway from the Pacific Ocean to Bering Sea. And then, once the Pass had been successfully cleared, the sailer might find himself facing a still more dangerous adversary—the drifting ice in the Bering Sea.

Days and weeks might go by before the ship could fight its way into the anchorage at the mouth of a river. A 40-day voyage from "state-side" to Bristol Bay was far from uncommon, and it often happened that as many as 63 days were

spent under way.

The working requirements? Here are excerpts from "Articles of Agreements and Wage Scale for the Season of 1907 between the various Alaska Salmon Packers and The Alaska Fishermen's Union."

"... They agree to give their whole time and energy to the business and interests of said Company, and to work day or night (Sundays and holidays not excepted), according to the lawful orders of the Captain, Superintendent, or whoever may be in charge for the Company, and for the compensation provided, but shall not be required to work for outside parties."

"... While preparing for fishing or after fishing has closed, the men shall not be required to work on Sundays as a rule, and if they are required to work any time on Sundays, such time shall be given back to them during the week. In case of emergency such as safety of ship or company's property being in danger, such work to be done at any and all times without giving time back."

back.



SCHEDULE OF WAGES AND PERCENTAGES

AS PREPARED BY THE

Fishermen's Protective Union

AR 1 HE

PACIFIC COAST AND ALASKA

FOR THE

Season of 1903

SAN FRANCISCO, January 13, 1903;

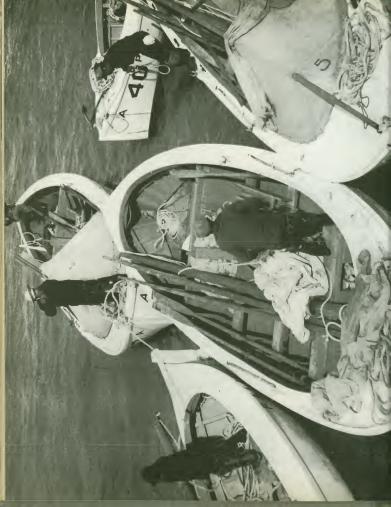
To the Members of the Fishermen's Protective
Union of the Pacific Coast and Alaska:

Contrades—The time is approaching when we will have to prepare for another season in Alaska, and it will therefore he necessary for us to more closely combine together, and it is absolutely necessary that we should thoroughly understand each other as union men. We, the Fisher men, fully realize our position, and we know that by standing together shoulder to shoulder as union men that we will succeed.

We have over 3,000 members in our Union, and



BRISTOL BAY SAIL BOATS at dock of Libby, McNeil & Libby cannery, Koggiung, Alaska. (Courtesy Louis Aurdal.)





PRINCESS SOPHIA ON VANDER-BILT REEF. Her tragedy is unique and well known in annals of seafaring the greatest disaster on the Pacific Coast. (Courtesy George Kilby.)

. . . All gillnet fishermen in Bering Sea to receive fifty dollars (\$50.00) as run money. In addition to this each gillnet fisherman shall receive five cents (5c) for each King Salmon weighing over 15 pounds; one and one-half cents (1½c) for each Red or Cohoe Salmon; one cent (1c) for each Chum or Dog Salmon; one-half cent (½c) for each Pink Salmon caught and delivered to the company. The Company is not compelled to take any Dog or Pink Samon, but if received they are to be paid for at the above rates."

A cosmopolitan bunch they were, the Bristol Bay fishermen. Italians, Finns, Norwegians, Swedes constituted the main force, with a sprinking of Danes, Irishmen, Scots, Germans, Hollanders—men of many races, creeds and color of hair. Peaceful and easy going as a rule, disagreements were slow to arise, tempers to flare. Such things did happen—there were black eyes or bloody noses now and again. By and large however, peace and good fellowship were the rule of

the fishing camps.

The actual canning work was done by the "China gang," under the command of the "China Boss." In due time the Iron Chink replaced the Chinese fish cleaning gang, and Filipino laborers took the place of the Chinese cannery worker. Later still the Filipinos were replaced by natives from the area adjacent to Bristol Bay, Aleuts and Aleut Eskinos.

NO RIGGING ON MASTS (opposite) and stepping them, setting sail was a two-fisted job for a husky man, especially when heavy sea was runing, boat pitching and rolling. (Research Dept. Pacific American Fisheries.)

REEF NET FISHERMEN WATCHING NET — Line of floats indicates "fence" or lead line draped with kelp to guide salmon into net. (Dept. of Fisheries, State of Washington.)





REEF NET FISHING IN SAN JUAN ISLANDS — net is seen at right,laid flat under water. When salmon are seen swimming over it, each man lifts his side of net. Lead lines shown at left and beyond boats. (Dept. of Fisheries, State of Washington.)

FISHERMAN'S DOCK

"Now Seattle's Fishermen's Dock is an indeed unique- and quite wonderful-piece of waterfront. It is located on the shores of Salmon Bay, which again is part of the Lake Union Ship Canal, the narrow stretch of fresh-water which connects Lake Union with the salty waters of Puget Sound. Fishermen's Dock is located on the south side of the canal, a mile or so above the Lake Union Canal Locks-the second largest lock-system in the world. The yearly tonnage passing through the Locks is quite impressive, to be sure. Much more important, from a sea-faring man's point of view, is the fact that this harbor, commonly called 'Lake Union,' affords an excellent moorage for ships and boats of all sizes, being one of the largest fresh water harbors in America, and the only such on the Pacific Coast. If anything so prosaic and eminently useful as a harbor may be called 'picturesque', Fishermen's Dock in Seattle is just that.

Hundreds upon hundreds of vessels, of all sizes and shapes, find berths here. Pleasure crafts, scows, tenders, freighters. Still and all, it's the fishing vessels which dominate the picture. Here you may see the Puget Sound gillnet boat, with its 'reel' in the cockpit: a one-man rig, the gillnet

boat, especially designed for the hardworking individualist who fishes it; here you find the otter trawler, or 'dragger', its stern sides adorned with heavy iron stanchions, upon which hang the 'doors' or otter-boards, each one of which may weigh upwards of 750 pounds; here is the salmon purse-seen boat, with its turn-table on the stern, and the shrimp trawler, with his own peculiar type of dragnet. The salmon troller, its long, slender trolling poles now raised, snug against the masthead crosstree, is easy to recognize. And here, first and foremost, is where you find that unique and wholly Pacific-Northwest-developed fishing vessel: the halibut schooner, king of the west coast fishing crafts.

"Yes, you may see almost any number, and almost any kind of floating craft at Fishermen's Dock; also, you may see what is tritely referred to as "the American melting pot" in operation: Slavonian, Austrian, Italian, Finn seine and gillnet men busy with their various types of nets; Norwegians, with an odd Swede or Dane thrown in, sharpening the hooks on their long-lines; here you meet the trollers and the trawlers, men of many nationalities, working side by side



SHE WAS MODERN TOO - IN 1910 — In the sockeys season of 1910, the new, husky, 45-footer Falcon was one of the most modern purse sine vessels on Puget Sound. She had "Plenty of guts"—a powerful 20 h, p, gas engine to pilot house her ownerskipper Peter Covich waited, tally sheet in hand, for the photographer to finish picture, so unloading of fine catch could begin. (Courtey Peter Covich.)

on their lines, nets, boats; and all in perfect peace and harmony and good fellowship.

"Seldom do you hear a word of any foreign language spoken on Fishermen's Dock. Without exception, the fishermen—so many of whom were born and raised on the far side of the Atlantic Ocean—do their level best to try to speak the language of their adopted country, not too successfully at times, perhaps, but nevertheless with great good will.

"Central point of Fishermen's Dock was Pete's Place; here gathered men of all fisheries, ages, nationalities and color of hair, for lunch, for a cup of coffee, or a glass of beer. Here mingled halibut skippers and seine skippers and trollers and trawlers and gillnetters, chiefs, cooks—and just plain fishermen, or 'plugs'. Pete's Place was ever a busy place; Pete himself did the cooking—he was a fair to middlin' cook—but he was the fastest worker in his trade I had ever seen. He wore a look of sour grief on his face every day, holidays included—maybe as a 'self protection', of sorts, so as to discourage anyone to ask for credit."

-from "Of Boats and Men" by A. K. Larssen.



PURSE SEINE ALMOST IN - now it's just to "dry up the bunt." Skipper Covich in skiff tells the boys how to do it. (Courtesy Peter Covich.)

"DON'T WHISTLE" SAYS THE OLD DORYMAN

The union articles do not mention it. The skipper will not call you over and breathe it in your ear. You will not receive any anonymous letter telling you about it. Yet even the youngest fisherman's wife knows.

You just don't whistle on board a fishing boat . . . particularly when at the wheel. Remember the old saying "Whistle up a storm?" Whistling will bring storm—in most cases a sou'wester.

It will also save you black looks or keep you from being used as a sea anchor if you don't mention the words "horses" or "pigs." That also means bad weather and bad luck all around. Anything can happen. If you feel a craving coming on to talk about animals, use the code words. A horse is a "drag beast" (Norwegian: trekk-dyr—often used). The pig is "grunter."

If you value your health, don't leave a bucket of sea water sitting on deck or turn the hatch cover upside down when you take it off. Either means engine breakdown for sure! Do not, under any circumstances, ever bring a black suitcase on

board. That's very bad form.

Now you may commit all these indiscretions and live to be forgiven. But you will bring eternal damnation down on your head if you ever bring an umbrella on the vessel. Brother man—that's the worst hoodoo of them all!



EIGH BUSCHMANN (right) skippered the first power seine boat to fish in Allaskan waters, the Kuth, shown opposite page. Man at left is Frits Frolich, assistant to superintendent Buschmann at Waterfall canner; in 1931, later superintendent at Sunny Point cannery of Nakat Packing Gorp. Eigil Buschmann was general superintendent for Nakat for 34 years. Courtesy Eigil Busch-

CANADIAN PURSE SEINER TERALIOS (Below left), was built in 1918 at the time of the break between old and new. Powered by gas engine the Zebalios was the very latest in seine boats. Note steering wheel outside plot house, probably forerunner of the flying bridge. Center, purse seiner crew pulling seine on board by hand and (right,) purse seiner with a load on. Crewmen are pewing salmon from fish hold to deck and from there to buyer's dock. (All couttery Seatel Port Commission.)







RUIH HAD A LOAD ON — smiling happily, the lucky fishermen are "rolling in" the last few salmon of a big haul. Not much free board left—the Ruth will have her stern under water once she gets under way. (Courtesy Eigil Buschmann.)









GARFIELD IN 1910 was one of the most modern purse seine vessels on Puget Sound. (Courtesy L. A. Sandstrom Jr.)

EVERYTHING THAT SWIMS

is victim of the otter trawl net

The fish net, that old and trusty tool of the trade, has, through the years, been reshaped into many forms to serve the fishing industry. Certainly one of the most ingenious fishing implements made out of the basic fish net is the ottertrawl, commonly called the "dragnet", or "dragseine", a most appropriate name, as the net is dragged along the bottom of the ocean.

In action, the otter trawl net resembles a large cone turned over on its side. The top, or point, of the cone is the fish bag, or "cod end", of the net, while the open or fish-gathering end of the net will be the cone's base. The opening, called the "throat," is kept open by means of the otter boards—"doors"—in the parlance of the otter trawl fisherman. The doors are made of heavy planks reinforced with strips of heavy iron; each door weighs upwards of 750 pounds. The lower, or bottom, edge of the door is further reinforced with a "shoe"—runner—of three-inch thick iron.

Steel cables, twenty-five to fifty fathoms long, connect the door to the seine (net). The towing cables, leading to drums on the winch, are connected to the opposite side of the doors in such a manner that, when towed, the doors will "shear out" away from the course of the vessel,

thereby forcing the throat of the net to remain wide open while being towed.

The bottom line of the throat, the "foot rope", is extra heavy so that it will follow the ocean floor; to insure full opening, the top line, or "top rope", is equipped with a varying number of ball shaped aluminum floats and constructed to withstand the pressure they will meet with at great depths.

As the trawler moves ahead at slow speed, the net, dragged behind, crawls along the floor of the ocean. Flounders taking a nap in the sand are rudely awakened by the digging foot rope; scared and confused they run hither and yon only to wind up in the cod end; codfish, ling, sablefish, rockfish—any and all members of the finny tribe which happen to be in the path of the dragnet will find themselves trapped and on the first leg of the journey to the frying pan. An extremely efficient fishing gear, the otter trawler is no "respecter of persons": even the sturgeon and the lordly king almon get caught in its jaws.

On the Pacific Coast ofter trawling is rather a "young" method of fishing, but during the last twenty years has gained great momentum, so that a large percentage of the total Pacific Coast bottom fish is now produced by this fleet.



SALMON TREE?—The fish boat swamped and sank at the dock before net was emptied. Now, liberally decorated with sockeye salmon, it is being hoisted up on Nakeen cannery dock, Bristol Bay. (Courtesy George Johansen.)



In other parts of the fishing world, however, otter trawling is an old industry. The English used otter trawls a century or so ago, operating with sailing sloops of 50 to 70 tons burden. Deep sea trawlers out of Yarmouth had a crew of six men as a rule. They fished hard and worked even harder. With only the sails for power, fishing could be done only when a fair to strong breeze was blowing; the towing cables were hauled by

FILLED TO BURSTING POINT (below) with red snappers, the codend is floating easily on the water. Right, fisherman swing the net past starboard stanchion preparatory to lifting it in. (Both courtesy Earl McCarty.)



hand power windlasses, and the net handled by sheer hand power. Trawling was said, in those days, to be a "rough game"; the pay was low and the hardships were most severe, especially during the winter months. Loss of life was very heavy, especially in the trawler fleet and many a weatherbitten fisherman preferred to subsist on short rations ashore rather than to ship out on a deep sea trawler.





OTTER TRAWLING— Lifted by the winch, the fish bag or cod-end is swung in over the railing and emptied on the deck. (Courtesy Earl McCarty.)

WHAT WON'T FISH EAT?

From halibut and cod skippers, fish packers, ichthyologists and the U. S. Bureau of Fisheries come strange tales of the finny gluttons of the sea. The records show a fish will eat anything it can get its mouth around and live to wiggle a tail about it.

The black cod of Alaska is especially noted for a voracious appetite. Schooners returning from the Gulf of Alaska and Bering Sea could produce items ranging from medicine bottles to skinning knives—all taken from the greedy gullets of the

cod and halibut.

The fishermen themselves, who harbor in Seattle's Salmon Bay, home port of the Pacific halibut fleet, do not think it very strange that a hundred pound fish should produce a dozen chunks of gold-bearing quartz or a full can of condensed milk. Other workers with imagination and a sense of curiosity have made a hobby of closely inspecting fish stomachs as they butcher them. A cannery man in Ketchikan, Alaska, told of finding pieces of sail canvas, iron chain links, clam shells seemingly twice as broad as the stretching limit of a halibut's mouth. He considers his queerest find a small hymn book printed in Russian.

In all fairness to fish, there are logical explanations for these oddities. Ship passengers, hunters, missionaries and natives drop articles overboard and the hungry cod or halibut see something moving in water, grabbing first and thinking afterward. No doubt one feeling a knitting needle inside him would have cause to regret his haste.

One curious story comes from a sport fisherman who opened a big Tyee salmon caught in the Campbell River on Vancouver Island, B. C. to find a half-consumed cigar in its stomach. Another salmon brought into a Bristol Bay cannery appeared so bloated as to have been poisoned or had an air hose stuffed in its mouth. The fact was the fish had swallowed a dorfish as laree as itself.

Fishing from a skiff, one man accidentally broke the handle of a water jug and was about to toss it overboard. The other fisherman checked him with the advice to save the jug for use on the mother ship. So only the glass handle was jettisoned. Months later the same two men caught a cod, in the stomach of which was an oddly familiar article—a glass jug handle. Decidedly curious, the men took the handle to the schooner and found that if fitted the old jug perfectly.

SBAHING SKAGIT TRAP Left, (Dept of Fisheries, State of Washington.) Center, lifting salmon from trap with steam brailer. (University of Washington Library), Right, unloading salmon from scow to cannery. Gate on def of fish bin is opened, water pumped in to load, fish floating through gate into mechanical elevator which brings them into cannery, (Courtesy Ralph Soberg.)





Bracelets, necklaces and even diamonds have been recovered from fish and the boats have brought to port such strange fish fare as a box of cartridges, a common table tumbler and a Mexican sombrero. The U. S. Bureau of Fisheries has records of fish that have swallowed ducks, mudhens and shore birds caught napping or disabled on the surface of the sea.



J. B. HECKMAN — Ketchikan business man and salmon cannery conner, invented the first contable floating salmon trap in 1907. A variety of floating two the salmon trap in 1907. A variety of floating two the salmon trap in 1907. Kodisk Island as early as 1896 but with dispariting results. Heckman's trap proved efficient and successful. (Courtesy Mrs. J. R. Heckman's



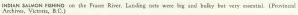
BECAME VITAL IN INDUSTRY
Floating salmon trap, complete
with watchman's shack, is ready
made, waiting for the tender to
tow it to a location. Invented by
salmon canner J. R. Heckman, of
Ketchikan, in 1907, the floating
trap became a success overnight.
In 1908 there were 15 in operation in Southeastern Alaska, one
in Central Alaska value, \$21,
600. (Courtey Ralph Soberg,
600. (Courtey Ralph Soberg,







BRAILING A HAUL OF SALMON on board purse seiner at Willard Inlet, Southeastern Alaska. (Courtesy Eigil Buschmann.)





NETS IN THE RIVERS

Double-ended skiffs were the first boats on the Fraser River—about 24 feet long, flat-bottomed, a great many of them built by Andrew (Andy) Wallace in his boat yard at the Granville Street Bridge. They were "poor sailors" and the gillnet fishermen had no other power than that transmitted from backs to arms to oars. Later they were to be emancipated from this hard labor by the round-bottomed "Columbia River" type boat.

He led a strenuous life, and it was about the same on the Columbia and in Puget Sound. He rowed his heavy skiff—or caught a sailing breeze—out to the fishing grounds in early afternoon and had his net in the water as dusk fell. Hand over hand he pulled his net, picked fish, set his

net again, hauled, picked fish—all the long night through. At sun up he rowed his boat back to camp, sold his fish, secured the boat, trotted up to his little tent on the beach, cooked himself a meal over the campfire. And by the time the weary gillnetter had finished his meal and rolled into a blanket it was almost time to row out again for another night's work.

A graphic description of gillnetting on the Columbia in 1895 is given in the album of J. H. Bratt, an Astorian photographer. "Gillnets vary in length and depth according to the means of the owner and the water in which he proposes to operate. Few are less than 1400 feet long, while a large proportion are 1800 feet, and have a depth

NORWEGIAN STEAM POWERED — When there was no wind sail boats had to depend upon strong arms and backs laid into the oars. (Courtesy E. E. Murray,)





STEAMER FARALION WITH DECK-LOAD OF ICE —In January 1910, she hit the beach in Cook Inlet, Alaska and was wrecked. (Courtesy William Wooton.)

of from 20 to 35 feet. A large gillnet is an important item of expense, and not too infrequently the hardy fisherman is compelled to abandon his net in order to save what is infinitely more precious his life—the risks attendant upon fishing near the ocean being many, without regard to what care may be taken. The more venturesome of the men allow their nets to drift across the entrance to the river; some sail boldly out to the ocean and en-

deavor to secure a haul before the first of the flood tide, when salmon are usually plentiful; while still others approach the breakers at Sand Island and too often fall victims of their temerity.

"The size of the gillnet mesh is determined by the caprice of the owner, and varies from 7 to 10 inches. During the early part of the season the small mesh net is most generally used, but from June to August, when the fish are uniformly large,

NO ENGINES BUT A LOT OF FISH —In 1891, salmon were received here at Anglo, B.C. Packing Company's station—Garry Point, Fraser River—for Phoenix and Brittania canneries up river from Steveston. (City Archives, Vancouver, B.C.)





AND MILLIONS MORE DIED Part of evening catch at Phoenix Cannery, Steveston, 1891. Salmon were so plentiful a fisherman would set out half his net, then start pulling it back. Before he could have that much in, he would have a boatload of fish. (City Archivey, Avancouver, B.

those who possess a net of each class, use that having the larger mesh. The material in these nets costs from \$275 to \$300, and consists of from 190 to 240 pounds of twine, 140 to 150 pounds of rope (on which are attached the lead sinkers and corks or cedar floats), 160 to 200 pounds of lead and 450 to 550 floats. When the net is made and cork and lead lines attached to top and bottom respectively, it is immersed in a tank containing tanning solution, and by this process the twine is hardened and colored is such a way as to be less readily seen by the salmon as they head up stream. The tanning process is renewed several times during the season, and proves a source of economy, because of the conserving effect on the twine. With the best of care a gillnet becomes almost worthless after two years' use, being frequently broken by large fish and torn by snags during the freshet season. The work of repairing, which is

performed on the net racks, requires considerable time, and must be done with great care, every portion being minutely examined and the smallest defect remedied."

Power boats were introduced into the Columbia and Puget Sound gillnet fleets in the early 1900s, in the Fraser a few years later. With power came larger crafts and small forecastles for the fishermen. They still continued to pull nets by hand-power, a good many years going by before the "live roller" came into use and later the motor-driven reel which wound the gillnet upon itself.

Seine fishing began on the Fraser around the turn of the century, the equipment consisting of a 4-oared skiff, 30 to 35 feet long, and a large scow. Both were towed to the fishing grounds by small steamboats like the Eva and Starling, which two operated out of the Delta area. With this equipment the fishermen went to Cowichan Bay



KNOWN AS "COLUMBIA RIVER" BOATS these sailboats were used by gillnet fishermen both in U. S. and Canada. Scores were built in Andrew Wallace boat-yard on False Creek — the first shipbuilding in Vancouver. (City Archives, Vancouver, Box.

DRYING OUT TIME — Salmon fishermen pulling net from boat to drying racks at Steveston, B. C., 1908. (City Archives, Vancouver, B. C.)



or Bell Bella, each crew of eight or nine men fishing in a designated area. The seine was pursed by hand winches on the scow.

The early Puget Sound purse seiners were the same open boats, propelled by oars, the pursing of the net done by handpower. When pursed, the net had to be hauled, hand over hand, and piled in the stern of the boat, ready for the next set. It was work which quickly "separated the men from the boys."

"This method of taking salmon," said J. H. Bratt in 1895, "is generally a profitable one, although financial reverses are sometimes met with. The seiners are most fortunate during those years when the water is low, but an early summer following heavy falls of snow in the mountains during the winter previous, invariably causes a heavy freshet and consequent financial injury to the seiner. The outfit of a seiner consists of ten men, four horses, seine, a large scow and a flatbottomed boat, and his operations are necessarily confined to favorable portions of the beach or slightly submerged islands, which at low tide afford an opportunity of hauling up the seine and removing the fish. The seines used in the Columbia are about 1500 feet long, and vary in depth from 15 feet at the ends to 160 feet in the center. They contain 650 pounds of twine, 200 pounds of rope and 150 pounds of lead, and cost upwards of \$1000.

"The launching of one of the flat-bottomed boats used by the seiners is an undertaking that is

not accomplished without much difficulty and expenditure of muscular force. After being loaded (with the seine) the boat is left stranded until the tide is flooding, when the crew await their opportunity and take advantage of the receding waves to assist them in getting it sufficiently far out to

permit the use of the oars.
"On starting out to make a haul, one end of the seine is left on shore, and to this a horse is hitched, while the boat's crew row out until all the seine

while the boat's crew row out until all the seine is in the water. Then the boat is rowed down stream and gradually shoreward until, when the beach is reached, the seine forms a semi-circle. Another horse is then called into requisition, and is driven up the beach. As soon as there is room, a third horse is attached about fifty feet behind No. 2, then No. 1 is taken off the end and follows No. 3, and so on until the head of the beach which is but 200 feet wide, is reached. Meanwhile the other end of the seine has gradually been hauled down stream until the ends meet, thus completing the circle.

"When the seine has been hauled in so that the lead and cork lines are on the shore, the center, or widest portion still remains in the water in a baglike formation. This also reaches shore in due course, and the fish taken out, when the work is again begun. These hauls are generally made between tides, and for one 'outing' 1500 pounds would be considered a good catch, from three to four hauls made each outing.

"These scows are the abode of both man and horse, and are divided into two parts, in one of which the men cook and sleep, the other serving as stable. They are generally kept near the shore and rest on the sand at low tide."

The seine boat which came to stay appeared in 1913 when the B. C. Kid was built at Port Guichon. An earlier boat, the Yankee Boy, which had been purchased in 1910 was an open boat with no decks, these being added when it came into use on the Fraser River.

Then came the single-cylinder heavy duty gas engine, of 1 to 25 horse power. It replaced the oars, made purse seining easier, more profitable by allowing boats to be built larger, more seaworthy and efficient.

In the second decade of the new century came the decked seine boat with forecastle for the crew and a pilot house for the skipper. With mast, cargo boom and a mechanically driven winch, the worst hardships were taken out of the purse seining fishery once for all.



BELOW OLD WOODEN GRANVILLE BRIDGE in Vancouver, a bout 1899 was the boat building shed and float of Andrew (Andy) Wallace, founder of Wallace Shipyards and Burrard Dry Dock. (City Archives, Vancouver, B. C.)



A SEA OF SAILS AND OARS

The water was alive with sails as nets were hauled aboard "Columbia River" salmon boats out of Steveston in Fraser River, 1905. Boats carried both sails and oars. At 6 p. m. Sunday a cannon signalled the start of the week's fishing—the 6 a. m. Saturday gun stopping it for the intervening 36 hours. After the starting "boom" there was a great rumbling roar of cedar floats being dragged over the gunwales, the river alive with moving boats and nets. So many salmon were caught so quickly a limit per boat—150 to 250—was set by the cannery according to its capacity to can fish accepted that day. Instances were common when

a single boat caught in its net two or three times the cannery limit before it could be hauled back. This entailed much futile labor as the salmon had to be freed from the meshes, the dead fish cast back in the river. One fishing season so many were thrown back and carried by tides into Burrard Inlet the rotting fish littered the beaches. In the summer of 1903 this condition actually stopped bathing and walking on the English Bay sand. A swimmer might bump his chin into a floating carcass or step on putrid flesh concealed under sand. (Archives City of Vancouver, B. C.)



Years before William Wooten became a vicepresident of Columbia River Packers Association in Astoria, Oregon, he had been "one of the boys" working his way up through the grades, and serving as tender-skipper, cannery foreman and superintendent.

As an avid reader he was well versed in Alaska lore before he set foot in that fabled land. And then as he watched the fishermen at their rugged and hazardous work he realized that while miners, mushers and trappers had been lauded in song and story, the fisherman was a forgotten man. So William Wooten set about to correct this situation and wrote this eulogy to a deserving fellow.

THE FISHERMAN

Alaska, the land of romance— Her tales are oft retold; The grandeur of her mountain peaks; Her valleys rich with gold. The silver horde which comes and goes; Of fortunes made in a day. The romance of the miner— As he mucks in the earth for his pay; The romance of the musher, As he hit the cold, cold trail— Bleary eyed and frozen stiff To get thru' the Dawson mail.

I've read her tales by the thousands From Cape Nome to Ketchikan, But never a poem or even an ode About the Fisherman.

No weakling here can take a chance, They're weeded out like chaff
No beardless youth or city dude
Can stand the hard, hard gaff.
Men with lots of guts, my lad—
Men that never cry
For they have to fight from dawn to night
Or else go down and die.
With a thirteen-foot oar
On that rough lee shore
You have to pull like sin—
The roaring waves will be your grave
If ever you give in.

You fight like hell with never a yell To get in a fathom of net; To get in a fathom of net; You've had no sleep and nothing to eat And your clothes are wringing wet., You've fished the sands, those treacherous sands

Till your very soul is sick;
Your mouth's red hot and your eyes
bloodshot—
But it's pick, you buggers, pick.

So here's to all the boys of the game— Here's to the miner bold. Here's to the musher of Arctic Trails When they are icy cold. And to the trapper and to the skinner, For all of them have sand, But the last and loudest cheer We'll give to the FISHERMAN!



GILLETTERS OF IONG AGO — At the turn of the century two types of beats were in use on the Fraser—the flat bottomed shift in the river, and outside, as competition increased, the round bottomed or "Columbia River" types as shown on the left. There were usually two men in each boat, one a licensed fisherman required to be a British subject, the other his boat puller. Canneries built and owned the boats at first, only a few hishermen "independent," later under license restrictions, canneries financed fishermen who purportedly then owned their own boats. (Courtesy The Fisherman, Nancouver, B. C.)

CLOSED PERIOD ON FRASER RIVER and Steveston fishermen are getting some much needed sleep, gillnets hung on racks to dry. (City Archives, Vancouver, B. C.)



SOCKEYE RUN

"If any of the Eastern visitors to the Alaska-Yukon-Pacific Exposition, to be held in Seattle in 1909," wrote Daniel L. Pratt in an article titled "Wealth of the Washington Seas" in the Pacific Monthly magazine April 1908, "desire to carry back to their friends a fish story that is worth the while, they may, of a calm afternoon in August of that year, leave the Exposition and journey to the southwest shore of Vancouver Island, on the Strait of Juan de Fuca, and there await the coming of the Sockey salmon run.

"If they reach their destination in due time and remain long enough their enterprise will be rewarded by a spectacle that can be witnessed at no other place in the world save once in four years

on Puget Sound.

"Off Otter Point, or some other point nearer the entrance of the straits, the rippling surface of the waters will suddenly be broken in the distance by the lashing of millions of tails and fins of silvery salmon, as the great schools work their way in from unknown places in the ocean on their way to the spawning grounds at the headwaters of the

Fraser River. Skirting the southwest shore of the island, the salmon will move in an almost compact mass, the sunlight scintillating from glistening backs for miles along the water-surfaces, the myriads of fish lashing leagues of sea into foam.

"Other eager eyes with a sterner purpose than mere sightseeing will be awaiting the same event with considerable impatience; waiting but to catch the gleaming signal flashed across the waters from a million scaly backs of the in-bound school of fish, ere they wire the intelligence to thousands of interested parties throughout the world that 'THE SOCKEYE RUN IS ON.' For, hinging upon this contingency is one of the greatest industries in the State of Washington. The Sockeye salmon packing industry produces every fourth year a product which sells in the markets of all important countries in the world for an aggregate of over five million dollars, and even in the off years yields an income to the state which is tremendous . . .

"It is hurry from the word 'go' after the fish once put in their appearance. When the news is





SALMON GILLNETS ON DRYING RACKS at Red Salmon Cannery, Naknek, Alaska. (Courtesy Ralph Soberg.)

flashed around the Sound that the run of fish has been sighted off Vancouver Island, a last scramble is made to place everything in readiness ere the fish enter the channels among the San Juan Islands and there encounter the traps and nets of the fishermen. Fish scows with their puffing tugs issue out from the canneries headed for the trap locations, and traps are set awaiting the coming of the fish. The purse seiners desert their camps in coves along the salmon banks and chug forth in their bulky gasoline seine boats awaiting the sight of the first school of fish. It is a formidable barricade, indeed, which confronts the little Sockeyes as they come in myriads through the channels of the islands at the head of the straits on their way northward to the mouth of the Fraser. The

NETS ON THE NAKNEK It's a fine day and fishing is good on the Naknek River, Alaska. (Courtesy Fred Soberg)



ON THE CODFISH BANKS

The brig Timandra, 120 tons, Capt. Matthew Turner, sailed from San Francisco in 1857 with an assorted cargo destined for Nicoloaevsk on the Amoor River. She was detained three weeks at Castor Bay, at the head of the Gulf of Tartary, because the river was full of ice. While the vessel lay waiting, anchored in three fathoms of water, the crew cast lines over the side in the hopes of some fish to vary the gallery offering of "salt horse".

"Here's something," one seaman shouted excitedly and hauled up an odd-looking creature, some three feet long, mostly head and tail. "Plenty more down there too."

"That's a cod-like they get in the Atlantic." Capt. Turner had never seen a codfish, as it was so identified by others on board, but knowmen could only catch what they could eat. The voyage was continued, the skipper noting in the log that cod were abundant and in good condition. Although four years elapsed before he again

ing the market value of this fish in San Francisco,

he was sure he had made a valuable discovery.

Two years later on another trip to the Amoor

River, he hove too off Saghalin Island near the

Gulf of Tartary, and again dropped a few cod

lines. Having no means of curing the fish, the

visited these waters, Capt. Turner had not forgotten the codfish grounds. He returned to the Gulf of Tartary in 1863 and this time the Timandra carried ample fishing gear and 25 tons of salt for curing the fish. Cod were plentiful at first, ten tons being taken in a few days all of which were salted. Then suddenly the fish disappeared. The brig ran down the coast to southern Kamchatka.





RUSSIAN BEAR REPULSED. Ships of yesteryear, W. H. Dimond, and City of Papeete. In June, 1907, the Russian gunboat Mandjur boarded the codfish schooner John D. Spreckles and barkentines Fremont, S. N. Castle and City of Papeete, confiscating their papers, ordering them to stop fishing.

Capt. Stensland of the City of Papeete, refused to obey the order. He read the Russian commander

an "opinion" written by John Hay while Secretary of State, to the effect that under international law vessels of any nation may fish anywhere, provided they keep three miles off shore.

The Russian commander grumbled and sputtered but Capt. Stensland won his point. Papers were returned to the respective vessels and fishing continued until loads had been secured. (Courtesy E. E. Murrav.)



WRECK OF THE HIGHLAND QUEEN. Runt Knusen, her owner, had engaged this seasoned halbut schooper in codishing on the Shumagin Island banks in the Shumagin Island banks in the summer of 1915, with Unga Harbor (Delarof Bay) as headquarters. Here in the Outer Harbor she went to her doom in a wild and violent storm in November of that year. (Courtesy Knut Knutsen.)



AROUND TUBN OF CENTURY saling schoners of this type were busy harvesting the codish banks around the Shumagin Islands and in Bering Sea. In 1903 typical ships were Cenna, Volent, Ajgo, Fremont, Ajgo, Fremont, Algo, Fremont, Algo, Fremont, Parther Alaska Codish Company; Pearl, Mary and Ida, City of Papeere, operated by the Alaska Codish Company; Uranus and Harriet G. operated by Edw. Pond. (Courtesy Knut Knutsen.)

where cod were again found in abundance and the crew again making great hauls the first day. But unfortunately the vessel lay near the rocky coast and on the second day in a dense fog both anchors were lost.

Now Capt. Turner was compelled to abandon fishing and return to San Francisco. He disposed of his fare—approximately 20 tons at fifteen cents a pound—and thus knew his trip would have been highly profitable if he had not lost his ground tackle and been able to get a full ship load. The following year he proved his contention, returning

to the vicinity of Saghalin Island and catching 100 tons of cod.

About this time another San Francisco ship, the schooner Alert, attempted to find cod in Bristol Bay but had to call the voyage purely experimental as only 9 tons were caught. The schooner Tropic Bird in 1882 had better luck since the trip was well planned by an organized codifishing firm—the McClollam Fishing and Trading Company of San Francisco.

This concern, later to become the Union Fish Company, established a codfishing station at Pir



ONE OF THE LAST SURVIVORS of Alaska codfish stations was Hardscratch Point on Unga Island. (Courtesy Ralph Soberg.)





CODFISHER C. A. THAYER sails for Alaska waters in the early '30s with 36 men under Capt. John Grottle. She had capacity for 600 tons of fish to be caught by hook and line by men in 18 power dories. The Thayer was owned by Pacific Coast Codfish Co. and is now being restored by San Francisco Maritime Museum. (Seattle Times)

rate Cove on Popoff Island in the Shumagin group, which fishing grounds—the Simeonofisky Bank—had been discovered in 1867 by the schooner Minnie G. Atkins. In a few years the company established another at Pavlof Harbor, Sanak Island, a third at Kasatski on the southern coast of the same island. By this time other codfishers were active in the Shumagins, among them the Sanborn under Capt. Morse, the Porpoise under Capt. Turner and the Sarah Louise, Capt. Holcomb—these three schooners making most of their catches on the west side of Nagai Island.

Other companies came into the business and by 1907 a great number of shore stations were in operation. The Alaska Codfish Company had wharves at Company Harbor and Moffat Cove, on Sanak Island; at Unga, Squaw Harbor and Kelly Rock, on Unga Island, and at Dora Harbor on Unimak Island.

(Opposite) READY SCHOONER FOR CODFISH BANKS — The C. A. Thayer shown here, Sophic Christenson and Wawona were the three stalwarts of the codfishing fleet in the early '30s. Dory men average 450 fish a day and made from \$1000 to \$1500 a season. (Seattle Times)

The Blom Codfish Co. operated a station in Eagle Harbor on Nagai Island; the Pacific-States Trading Co. had two—in Northwest Harbor on Little Koniuli, and at Ikatik on Unimak Island.

In the Bering Sea's latter codfishing days the three-master C. A. Thayer was a colorful voyager out of Puget Sound. Reprinted from the Seattle Times of April 18, 1930, is this account of the schooner's sailing day.

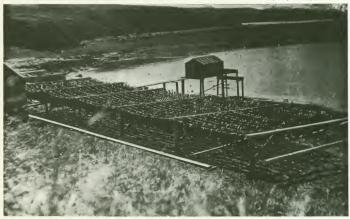
"Aksel Hakestad, bo'sn of the three master C. A. Thayer, had a puzzled expression on his weather beaten face as he watched his crew mates come over the side and head for the fo'castle. The Thayer was ready for sea. The tug was along side. Soon they would be heading for northern waters for another long battle with the elements.

"But Hakestad was not thinking of gales or mountainous waves which might swallow up the Thayer's dories and drown her fishermen. He was studying the seventeen men of brawn, veterans of the codfish banks, and wondering if he would retain his crown as highliner of the C.



STURDY SONS OF THE NORTH — Cod fishermen at Union Fish Co. station, Unga Island. (Courtesy Ralph Soberg.)

CODFISH ON DRYING RACKS at Coal Harbor codfish station, Unga Island, Alaska. (Courtesy Ralph Soberg.)





GOLDEN STATE loading salted codfish at Unga, Alaska. (Courtesy Ralph Soberg.)

A. Thayer. The words of J. E. Shields, president of the Pacific Coast Codfish Company, owner of the schooner, raced through his brain. Shields had said:

"They're the finest fishermen from Greenland to the Bering Sea. All are old-timers on the banks."

"Hakestad had a snug winter ashore, for last season he caught nearly 25,000 codfish during the cruise of the Thayer. It meant a fat purse, but more than that, he was proclaimed the champion fisherman of the stout little three-master, the highliner of the C. A. Thayer, the finest schooner of the Bering Sea codfish fleet. Could there be a greater honor, he thought, but the owners of the Thayer immediately recognized his prowess. They promoted him to bo'sn, a position of authority over the hardy crew of sailors who man the Thayer. However, Hakestad must defend his crown and when the schooner reaches Bering Sea he will put out in a dory day after day in an effort to beat or at least equal his record of 25,000 codfish

"Among the seventeen fishermen who will make an effort to win the title of highliner of the Thayer are Ben Shanahan, fifty years a fisherman, and John Markie who, as Shields expressed it, has spent forty-nine years in a dory.' Neither of these men has missed a season since they started cruising to the banks. Shanahan was highliner several seasons and hopes to lift the crown from Hakestad

"However, the tallyboard will tell. Every fish is counted as it is taken aboard the schooner from the dories but payment to the fishermen is not made until the catch is landed in port. Highliners of the fleet have made more than \$1,500 during a season, some of them averaging between 400 and 500 fish a day. Codfish are caught with hook and line with one man in each dory. A line with two baited hooks is thrown over each side.

"Capt. John Grottle, veteran fishing vessel macker, commands the C. A. Thayer, Thomas Felstad is mate. The schooner carries thirty-six men all told and has capacity for 600 tons of fish. She was towed fifteen miles off Cape Flattery last Thursday by the tug Sonoma, spread her sails and headed for the fishing banks.

CODFISH DORIES at Union Station dock, Unga, Alaska (Courtesy Ralph Soberg.)





VILLAGE OF UNGA on island of same name, in Shumagin group, Alaska, was the site of several codfishing shore stations. (Courtesy Knut Knutsen.)

"If all goes well the Thayer will be back in port early in September. She has eighteen power dories, is equipped with electric lights and ranks as the most modern vessel ever sent to the banks. One other codifishing schooner, the Wawona of the Robinson Fisheries, is on her way to the Bering Sea fishinging grounds. She left for sea last Wednesday in tow of the tug C. C. Cherry."

The cod fisherman's workday began in the small hours of the morning, between 3 and 4 o'clock in spring and summer, an hour or so later during fall and winter. Around 10 in the forenoon the first dories would begin to straggle in to the station, loaded to the gunwales with shiny, fresh cod. By noon the last dory would be in and the fishermen gathered in the messhouse for a hearty meal.

Next came the work of taking care of the day's catch. The crew would divide into "dressing gangs", each gang consisting of a "throater", who cut the cod's throat and opened its belly with a couple of swift strokes of his dressing knife, a "header", who separated the cod from its head and entrails, a "blackskinner", whose job was to remove the black membrane inside the cod's belly.

Other men with wheel-barrows moved the dressed fish from dressing house to saltery where the fish was split, washed and salted.

The dories were of the "eastern" or Grand Banks type, 14 to 15 feet in length, bottom measure, and capable of carrying 180 to 220 codfish. The small size dory was preferred because the larger ones, when loaded, were too heavy to row if a breeze should spring up while the boats were on the ground.

The station fisherman was furnished boat, housing and grub, and for his catch he received 25 to 30 dollars per thousand fish—that is, fish over 28 inches long. Smaller cod had to be counted "2 for 1" or half price.

Hand lining for cod was "rugged work for rugged men"; shore stations and codfish schooners were fields where the weak and the lazy found no place to linger—only the tough and the rugged ones could survive and make a living. The cod fishermen were accordingly generally looked upon within the fishing fraternity as a "tough breed of cats" and could boast a great number of "characters"—both lovable and otherwise.



COAL HARBOR CODFISH STATION
—Unga Island, Alaska. (Courtesy Ralph Soberg.)

THE "SOPHIE" RAN TO COD

Claiming the greatest voyage ever made by an American codfishing vessel, the four-masted schooner Sophie Chirstenson was towed into Puget Sound Sept. 5, 1933, after five months in the Bering Sea. Captain-owner J. E. Shields and crew claimed for the Sophie (1) the largest total catch made by one ship on one voyage—453,356 fish, 700 tons; (2) largest catch ever made by one man on one voyage—Ray Press—25,487 fish; (3) largest catch made by one man in one day's fishing—Dannie McEachran, Newfoundland second mate—1,051 fish; (4) largest catch made by one ship in one day—1,6851 fish.

Records or not, the Sophie had just concluded its finest trip with some \$30,000 pay to divide among her crew of forty-one. She brought back one black mark—empty dory No. 13. It had been found after a five-day southeasterly gale and twenty-eight year old Sven Markstrom was

missing.

Capt. Shields and 2nd Mate McEachran told of days in the Bering Sea when a gray cloud-rack scudded over the mastheads as she labored through a smother that swept her decks from jib boom to taffrail. In this sea the dories, swung over the side one by one, were whirled away and out of sight as the great, gray waves churned along the schooner's sides.

Out in the dories each fisherman was alone between turbulent sea and sky, his outboard motor keeping him underway as the little craft soared and plunged, fishing all the time until the load crowded the gunwales. Then back toward the schooner and after making fast his falls, each man would dive like a porpoise for the decks as the sea swung him level with the pitching rail.

The men told of that record day—July 24 when the dories came out of the fog laden with enough fish to swamp the stay-aboard crew which had to split and salt the catch and everyone had visions of gold at the end of the rainbow.

The captain and men spoke low when they talked of that other day when Sven Markstrom was lost to leeward in the gale. They could not see the man alone in the dory as the ship lay miles

PAY PRESS CAUGHT 25.487 FISH.— In former times dories used lego-mutton axila and sometimes failed to get back to the mother ship. The Sophie Christenson's 16-foot boats were equipped with 12-horsepower motors set in a well, protected by a canvas shield. They fished from dawn to dark not more than five or six miles away from the mother ship, kept an eye and the ship of the ship is ship of the ship is ship of the ship of the



HEADS AND TAILS.—Headers and splitters on deck of Sophie Christenson. Codfish are brought in by fishermen in dories all during the day, split, cleaned, salted and packed in brine curing vats. The butchering crew works until the day's catch is all below decks. (Kirwin photo from "This Was Seafaring.")



FAMOUS COPHSHER SAILS FOR BERING SEA — Four-masted schooner Sophie Christenson spent most of her life on the sea lanes between Seattle and northern codishing banks. The Sophie was built in Port Blakely in 1901. She was the most noted of the fleet which included such stalwarts as C. A. Thayer, John A. of the Pacific Coast Code Stales of the Stales of

away but they knew the trampling thunder of an Arctic sea towering out of sight. Somehow they knew this man would never come back yet waited in silence under a beacon flare on the heaving deck. Five days later when the gale had blown itself out they found the empty dory. The men accepted this stoically as a part of codfishing in the Bering Sea.

The Sophie Christenson always made good newspaper copy. Writing in the Seattle Star, April 28, 1937, H. E. Jamison told of her preparations for another five-months stay in the north.

"Towering above the dock sheds the four masts of the Sophie Christenson have been beckening

waterfront wanderers to Pier Four. Monday 22 dories were snuggled up to the port side of the windjammer, like so many chicks on a frosty morning.

"They were waiting patiently to be hoisted aboard and nested 'tween decks for their long trek to Bristol Bay. Once beyond 'Smoking Moses' (Mount Shishaldin) in the Aleutians, these frail craft will be manned by lusty codfishermen.

"Capt. John Shields, large and rosy-cheeked, looking more like a small town business man than a deep sea fisherman, was busy looking after last-minute details and checking supplies aboard. He did manage to take time out to tell me he had 400 tons of salt aboard and that in the five months

they'd be gone he hoped to bring back at least 600 tons of codfish.

"The fishermen work on a share basis, while the others are on a monthly salary. Aside from the officers, the 'others' are mostly the dress gang—those who stay aboard, dress and clean the fish before they are passed to the salters in the holds.

"The railings of the Sophie are scarred deep by lines from those aboard who fish when time lags

heavy on their hands.

"The fisherman I was talking to had been battling the waters of Bristol Bay for 23 years. He told me that in the old days the dories were fitted with lego mutton sails. When it blew up a storm the fishermen, who could not get back to the mother ship, fashioned a sea anchor from a sail and hove to. Occasionally men were lost.

"Now the 16-foot dories are equipped with 12 h. p. motors. These light motors are installed in a well that is entirely decked over. The bows are fitted with canvas shields to break the spray that

comes aboard.

"The men fish from dawn to dark. They are not supposed to go much farther than five or six miles from their vessel and keep a weather eye peeled for the signal that warns them the barometer is taking a nose dive. When the jib of the mother ship is hoisted they are supposed to make for it and batten down.

"The cod is a bottom fish or, as my informant told me, a 'gurry sucker.' The mother ship anchors on the banks and the dories, when they are



READYING SAIL ON CODFISH SCHOONER. — "We're bound for blue waters where the great winds slow; it's time to get the tacks' aboard, time for us to go." Seamen set one of the Sophie Christenson's manualisa and lay out chains and cables in preparation of the state of t

dropped over the side, drift with the tide, dragging an anchor, around one of the flukes of which has been fastened a half hitch. This hitch on a taut line, robs the anchor of its effectiveness. The anchor bumps along the bottom, somewhat checking the speed of the dory. The fisherman has a line in each hand, one over each side of his craft, and as soon as he strikes good fishing he pays out all his anchor line. The slack causes the half hitch to come adrift and the anchor holds.

EANLY OFFEATOR of an indeppurdent codifishing estation in the Shumagins was Capt. Knur Knutsen (left). He had lost his schooner, the Highland Queen, but had no intention to quit fishing. He found a working partner in Danish Peee' (right) to cooperate with independents, managed to get enough lumber and nails to build a station. The two partners even hired a helper . Louic Grimkhutsen (Courtesy Knut Knutsen).





KNUT KNUTSEN'S FIRST codfishing station, Unga Harbor, was modest enough but it caused a minor revolution in the Shumagin Island cod fishing industry by paying its fishermen \$10 a ton above the Company station price. (Courtesy Knut Knutsen.)

"As soon as he has a load he hauls up the anchor on a handy gurdy, cranks up his engine and heads back to the ship. After the fish are loaded aboard the schooner he goes aboard for a 'mug up.' The table is never unset and the fishermen eat all they can whenever they can. 'They fed swell on the schooners,' said my fisherman.

"If he shouldn't catch any fish he drifts back toward the mother ship when the tide turns and

keeps at it until he has a load.

"The fishermen average, over and above expenses, about \$500 or about \$100 a month. The fish average about three and a half feet in length,

but are mostly head and tail. They are caught in from 20 to 40 fathoms,

"Incidentally the fishermen never touch the fish with their hands. As soon as they are hauled alongside they slit the throats to bleed them. Then by skilfully manipulating their gaffs, they extricate the hook. They pitchfork them aboard the mother ship with a long-handled single-prong fork, called a pew.

"All fishermen think theirs is the toughest of all fishing, but there is no doubt that dawn-to-dusk codfishing ranks close to halibut fishing for arduous work."



BATTLE OF THE BANKS

The invasion of Alaskan waters by Japanese fishermen began to threaten U. S. codfishing in 1937. Several packers in the State of Washington decided against hazardous trips to the Bering Sea. Codfish catches had declined the four years previous owing to crab fishing by the Japanese from Unimak Pass to Amak Island in the Bering Sea.

Capt. J. E. Shields, president and manager of the Pacific Coast Codfish Company as well as seasoned skipper of the schooner Sophic Christenson, at first declined to send a vessel north for the first time in twenty-seven years, feeling that the Japanese had driven out the American ships. Later

he changed his mind.

"We're not going to take this lying down after all," he declared. "We'll be late but we're going." He said crabs were codfish food and the Japanese were thus ruining the codfish catch but that he would not quit easily. The Sophie Christenson sailed north.

In August she returned with Capt. Shields reporting the Japanese invasion of Bristol Bay continued unabated and said he had affidavits from his crew stating the foreign vessels were setting

nets and hauling in salmon.

Complaints had been sent to the U. S. Bureau of Fisheries by American fishing concerns, about the Japanese activities, asserting the foreign vessels would eventually deplete the salmon banks as well as the codfish.

Again in 1938 the Sophie sailed for the Bering Sea. On May 25 the following story broke in the

Seattle Post-Intelligencer:

U. S. SHIPS ASK ARMS IN ALASKA FISH WAR Open Break With Japanese On Bering Sea Hinted Here

"Threats of open warfare between American and Japanese fishermen in Bering Sea broke yesterday with a wireless appeal for rifles and ammunition for two American vessels in the north.

"The news electrified the Seattle waterfront and brought an announcement from the Alaska Fishermen's Union that immediate reinforcements would be sent north on the steamship Mount Mc-Kinley and sailing ship La Merced today.

"A shipment of rifles and ammunition for the Sophie Christenson and Charles R. Wilson of the Pacific Coast Codfish Company will also be sent, G. W. Shields, secretary of the company, declared yesterday upon receipt of a wireless from his brother, Capt. J. E. Shields, announcing that the Bering Sea was covered with Japanese boats.

"'Bering Sea covered by Japanese boats and nets north of Black Hills' the message read. 'No cutters around. We have God-given instinct to shoot straight. Please ship dozen high-powered rifles and plenty of ammunition. Duplicate order for Wilson.'

"G. W. Shields said that the arms would be sent but refused to indicate how. 'That will be a secret,' he said, 'We don't want them intercepted

on the way.'

"Coast Guard headquarters in Seattle said cutters and patrol boats were on duty in Bering Sea and Bristol Bay,



ONE MAN CODFISH STATION on Unga Island, Alaska. (Courtesy Fred Soberg.)



PIRATE COVE ON POPOF ISLAND was the site of the first shore codifishing station in Alaska. The Thomas W. McClollum Company, later known as the Union Fish Company of San Francisco, established its first station here in early '70's and others followed all lang the shores of the Shumagin Islands. (Courtesy Knut Knutsen.)

""We will not fool around any longer with this Japanese situation," declared William Hicker, secretary of the Alaska Fishermen's Union. "The fishermen are angry and will take action to drive the Japanese out. Our men going north will be ready for action."

"Shields said that the Sophie Christenson carries a crew of forty-three men and the Wilson carries twenty-four, all of them 'good men."

"Seventy fishermen will go north on the Mount McKinley under charter of the Nakat Packing Corporation and officials intimated they would not look over their baggage too carefully. They said there was some question as to whether the Japanese were fishing for salmon or crabs. If they are fishing for salmon there will be hell to pay, one said.

"Hicker said he had been advised there were fifteen Japanese boats within eight miles of the American shore and that they were making trips

to shore 'when no one is looking.' '

As history knows it was an "almost" battle. The Coast Guard stepped in to assert itself as the delegated authority. The guns did not go north or at least they were never used and the matter passed into the hands of the treaty makers.

THE VILLAGE of Nushagak, Bristol Bay. (Courtesy William Wooton, Astoria.)



ROMANCE IN THE PRIBILOFS

The seal is not a fish. Yet the subject of North Pacific sealing is linked closely with commercial fishing. As the owner of a beautiful and desirable pelt, the fur seal found itself the subject of a relentless hunt, both on land and water. Large fleets of sealing vessels operated all along the Pacific Coast, killing the sleek and valuable animals

by the thousands.

Three different herds of fur seals are native to the North Pacific. Although they belong to the same genus, each has its own peculiar characteristics. The Russian herd finds its home on the Kommodorsky Islands in the Bering Sea; the Japanese herd breeds on a small island near Patience Bay off the Sakhalin Peninsula: the

American herd, which is by far the largest of the

three, has its breeding place on the Pribilof, St.

Paul and St. George Islands, some 350 miles west from the Alaska mainland and about 250 miles north of the Aleutian Island chain.

"Nearly 175 years ago," writes Ralph C. Baker, assistant chief, branch of Alaska Fisheries Bureau of Commercial Fisheries in his "Fur Seals of the Pribilof Islands," "Gerassim Pribilof, navigator in the service of Imperial Russia, joined the search for the breeding grounds of the North Pa

cific fur seals. Each spring the seals were seen to swim northward through the passes of the Aleutian Islands and disappear into the fog and mist of Bering Sea. In 1786, 3 years after his search began, Pribilof came upon the islands that now bear his name and found fur seals along the beaches in seemingly uncountable numbers. Almost immediately the teeming rookeries began to yield sealskins for the fur markets of the world, at about the time the thirteen colonies on the Atlantic coast of North America were forming a new nation.

"Two years before the discovery of the Pribiof Islands, adventurous skippers from New England and Europe had discovered commercial possibilities in the great herds of fur seals in the South Sea Islands. The first experimental cargo of 13,000 pelts from the Southern Hemisphere appears to have been taken at the Falkland Islands in 1784 by the crew of the American vessel States

from Boston.

"In the 50 years that followed, the fur-seal rookeries on Mas-a-Fuero, Juan Fernandez, the South Shetlands, Prince Edward, the Antipodes, and countless other islands were destroyed as fast as they were discovered. Literally millions of pelts were taken to the Canton market to trade for tea.

SEALING FLEET—1901 Part of the North West Coast Pelagic sealing fleet, at anchor in the harbor of Victoria, B.C. Group includes Carlotta G. Cox, Hennetta, Agnes McDonald, Brenda, Annie C. Moore, Libbie, and other famous sealing vessels. (Provincial Archives, Victoria, B.C.)





"LETS HAVE YOUR ATTENTION, GIRLS."— The fur seal bull is a staunch believer in polygamy and delights in having many wives. He may not be monarch of all he surveys but he most certainly rules his harem and will fight anything that interferes. On a crowded rookery like this one on the Pribilo I slands, one harem may be so close to another that they may appear as one. Each bull however knows the border well and watches it zealously. Woe unto the intruderi (Photo by A. K. Larssen)

silks, and other products of China. The huge populations of fur seals south of the equator were rapidly annihilated, with the exception of small herds that still exist off the coast of the Union of South Africa, Uruguay, and New Zealand.

"The exploitation of the Alaska herd at first followed the same destructive pattern as that pursued by sealers in the southern seas. Twice during the Russian administration the herd on the Pribliof Islands was threatened with annihilation: first, through failure to restrict the numbers of seals killed, and later by failure to protect the females. The killing of females finally was forbidden by Russia after 1834, and the herd began to increase. The Russians are said to have taken

more than $2\frac{1}{2}$ million pelts between the time of the discovery of the islands and the sale of Alaska to the United States in 1867.

"Immediately after the purchase of Alaska by the United States, a number of independent companies began sealing operations on the Pribilof Islands, taking about 300,000 skins the first season. An act of Congress on July 27, 1868, prohibited the killing of fur seals, and on March 3, 1869, the islands were set aside by the United States Government as a special reservations for the protection of the animals. A year later the United States Treasury Department was authorized to lease exclusive rights to take seals on the islands, with the stipulation that no females were

to be taken. Further legislation in 1874 authorized the Secretary of the Treasury to establish catch quotas and open seasons for the lessee.

"Under the first 20-year lease, beginning in 1870, the Alaska Commercial Company took 1,977,377 seal skins. A second 20-year lease, to the North American Commercial Company, produced only 342,651 sealskins for the period ending in 1909. The leasing system was discontinued in 1910, and since then the Alaska fur-seal herd has been under the management of the Federal Government, first by the Secretary of Commerce through the former Bureau of Fisheries, and now by the Secretary of the Interior through the Bureau of Commercial Fisheries of the United States Fish and Wildlife Service.

"Fur seals are vulnerable to capture while at sea as well as on land. Pelagic sealing, or taking of fur seals at sea, began to develop on a commercial sale about 1879. As practiced extensively by American, Canadian, and Japanese fishermen in the North Pacific, pelagic sealing resulted in the indiscriminate killing of the seals, without regard to age or sex. The pelagic take of sealsking

reached a peak of 61,838 in 1894.

"Almost a million skins were taken on the high seas from 1879 to 1909, and many of the seals shot or speared in the open were not recovered. Since females comprise 60 to 80 per cent of the pelagic catch the effect on the Alaska herd was disastrous. By 1909 the Pribilof herd was reduced to 134,000 animals and the two smaller herds off the Asiatic coast were also faced with extinction. "After extended diplomatic negotiations and a long series of ineffectual bilateral agreements, the United States, Great Britain, Japan and Russia concluded a convention on July 7, 1911, for the protection of the fur seals of the North Pacific. Pelagic sealing was prohibited except by aborigines using primitive weapons. Each country owning furseal rookeries agreed to share 30 per cent of its annual take of sealskins—Canada and Japan each to receive 15 per cent of the sealskins from the Priblof Islands and 15 per cent of those from the Cammander Islands, and Canada, Russia and the United States each to receive 10 per cent of the pelts from Robben Island.

"Éarly in May, before the last snowdrifts have meldet, the first mature male fur seals come ashore on the Pribilof beaches. These beachmasters, as the bulls are called, take up stations on well-defined beach areas smoothed by erosion and by centuries of use by other generations of seals. The bull seal is at least 7 years old before he is able to acquire a harem. He attains his prime between 12 and 15 years of age, and may live 20 years or longer. The harem bull weighs from 450 to 600 pounds, and has a pelt that may be dark brown, reddish brown, dark gray, or black. He develops a short bushy mane over his shoulders

in his late years.

"A month or so after the bulls arrive, the mature females appear. These weigh only 60 to 100 pounds. A few females bear young when 5 years old, but most of them are 6 or 7 years old when their first pup is born. The period of grestation



"STAY WHERE YOU ARE!" — A fur seal bull which has acquired a harem is called a "beach master." And masterful he is, fangs needle sharp, fast and agile on his flippers in spite of 600 pounds of bone, blubber and muscle. (Photo A. K. Larsen.)



ETERNAL VIGILANCE in this case is the price of a harem. While the "beach masters" keep an open eye on their wives, the bachelor bulls are keeping an eye on the beach masters. (Photo by A. K. Larssen.)

is between 11 and 12 months. Adult females and the younger animals of both sexes vary in color from silvery gray to dark brown, with lighter tones of tan and reddish brown on the lower parts of the body. The females, or cows, are highly gregarious. As many as 30 to 40 assemble in one harem before a neighboring bull, a few feet away, can acquire one cow."

With the first seal contract to Alaska Commercial Company went also an emancipation of the native inhabitants of St. Paul and St. George Islands. As recounted in full by L. D. Kitchener in "Flag Over The North", the contract obligated this trading company, in addition to paying rents and royalties, to furnish without cost to the island natives 25,000 dried salmon, 60 cords of firewood and a sufficient quantity of barrels to preserve the proper meat supply.

It was also necessary that a school be maintained on each island for eight months each year and the contract made it unlawful "to keep, sell, furnish, give or dispose of any spirituous liquors." The Alaska Commercial Company was prohibited from using any firearms for sealing—no females, no seals of either gender under one year, no seals in adjacent waters, on beaches of hauling grounds could be killed. Only in June, July, September and October could the harvest be taken.

With the signing of the contract, Charles Bryant, a retired whaling captain from Massa-chusetts, was appointed as "Special Treasury Agent in Charge of Seal Islands." The contractors at length found two physicians willing and qualified to practice at such a location. Rookeries were visited and natives questioned on seal lore. The ears of 100 young bachelor seals were clipped

LUKANNON

by RUDYARD KIPLING

Some fifty years ago the fur seal population of the Pacific was in grave danger of being erased from the face of the ocean. But what could the fur seal people do about it? Nothing, for fur seals cannot send delegates to Congress or untie petitions for relief from their tormentors. They knew their race was doomed if the greedy sealers were allowed to "shoot them in the water and club them on the land." Then came their spokesman—Rudyard Kipling.

- I met my mates in the morning (and oh, but I am old
 - Where roaring on the ledges the summer groundswell rolled.
- I heard them lift the chorus that dropped the breakers' song—
 - The beaches of Lukannon—two million voices strong.
- The song of pleasant stations beside the salt lagoons,
 - The song of blowing squadrons that shuffled down the dunes.
- The song of the midnight dances that churned the sea to flame
 - —the beaches of Lukannon—before the Sealers came.
- I met my mates in the morning (I'll never meet them more!)
 - They came and went in legions that darkened all the shore.
- And through the foam-flecked offing as far as voice could reach
 - We hailed the landing parties and sang them up the beach.

- The beaches of Lukannon—the winter wheat so
 - The dripping, crinkled lichens and sea fog drenching all!
- The platform of our playground, all shining smooth and worn!
 - The beaches of Lukannon—the home where we were born.
- I meet my mates in the morning, a broken, shattered band.
 - Men shoot us on the water and club us on the land:
- Men drive us to the salt house, like silly sheep and tame.
 - And still we sing Lukannon—before the Sealers came.
- Wheel down, wheel down to Southward; oh Gooverooska, go;
 - And tell the deep sea Viceroys the story of our woe.
- Ere, empty as the shark's egg the tempest flings ashore—
 - The beaches of Lukannon shall know their sons no more.



Excerpts from the log of sailing schooner Carlotta G. Cox on pelagic sealing voyage, 1902. Taken from log book in British Columbia Provincial Archives.

AH, FOR THE LIFE OF A SEALER!

Friday, Jan. 31st 1902.

Cast off moorings & made fast tow boat S/S CONSTANCE alongside & proceeded towards anchorage. Anchored in James Bay in 3 fathoms water 15 fatms. cable on port anchor. Set anchor watch. Lights as per port regulations.

Sunday, Febr. 2, 1902.

Mod. breeze & overcast. Cape Flattery Light boor South a/co S. W. Strong wind & heavy Westy swell. Furled mainsail & flying jib, a/co S. by W. Courses W by S. S. W. Wind East.

Tuesday, February 11.

2:00 Heavy gale $\mathcal E$ mountainous sea. Sky overcast.

8. Similar weather. Put oil bags over, keeping sea from breaking on board.

 Similar weather. Sky slightly breaking up & signs of moderation.

Wind moderating, heavy swell from South.

6. Slight rain 5-30 P. M. Woor ship on star. tack 6 P. M. reefed & set foor staysail.

12 P. M. Strong to moderate gale & hazy throughout.

March 2, 1902.

Strong gale & heavy sea.

7:30 Reef out Foresail & set it.

8. P. M. Light wind. Latitude 40-20, Longitude 125-50.

Monday, March 3, 1902.

Boats out, light S. E. wind. But breezes up about the time the last boat gits her place and soon gits very rough.

2. Boats came on board with 12 Seals.

8 P. M. Breezing up fresh S. E.

Sat., March 15, 1902.

Fresh N. W. Too much wind for boats to be put out. Lat. 30-06. Longt. 123-35.

Wed., March 19, 1902.

Gale of wind from N. W. Hove too under Reefs.

Monday, March 31, 1902.

Calm. Boats out early. Four Schrs. in sight. Point Arena Light bearing N about 15 miles. Boats return about dark with 20 seals. Sch. OCEAN BELLE with 6 skins get 1 Bbl. Beef from him. Wind breezing up S. E.

Wed., April 16, 1902.

This day begins with fog. 7 set 2 reefed foretopsail. Strong breeze & foggy.

10. Moderate gale with heavy sea.

12 Wind and sea moderating.

Speak MARY TAYLOR.
 Monday, April 28, 1902.

Fresh breeze from N. E. & overcast. Wind die out calm put out boats and take 49 skins. See lots of travellers. Lat.: 58-22. Longt.: 139-42.

SEA LIONS IN ALEUTIAN ISLANDS
The commercial fisherman is a
peace loving fellow with few
hates but this creature brings
down his wrath. The sea lion
destroys untold thousands of
pounds of valuable food fish
every day, often snatching fish
off the hook or tearing it out of
the gillnet. (Photo by A. K.
Larssen.)



at St. Paul to see if they would be found the next year at rookeries where they were born. The skill of skinning seals without injuring the fur was practiced intensively.

The Pribiloff natives were apparently pleased to have regular and continuing work, and the right to harvest the animals native to their islands.

They were a friendly, gentle people descended from Aleutian and Kamachatka colonists whom the Russians had imported as seal hunters in the days of Gerassim Pribliof. They were fond of music and parties with a natural spiritual sense which centered in their church and charity for widows and orphans. Living half-underground in sod huts, they emerged only briefly from their seal robes in the cold season from November to April. The rest of the year they were very active with their sealing. They were intelligent and imaginative to live under these rigorous conditions but subject to lung diseases among others.

They had a system of electing chiefs who were removable if they did not abide by the will of the people. The natives had four classes—first, the most expert in killing and skinning which made them good citizens; second—those failing to make top grade; the idle and indolent: and fourth, boys learning to seal. They were paid 40 cents per skin, the first class drawing full shares and each class proportionately less. One first class share was allotted to the priest and two on each island toward the construction of a new church.

These natives accepted their new status as wards of America eagerly and industriously. They banked savings and bought more and more American types of goods, bowler and derby hats, ties and waistcoats and the women read the fashion magazines and ordered gowns, hats, cloaks as well as dress goods from San Francisco. However, they did not take to American religions and were hostile on both islands to an English school. They spoke and wrote both Aleut and Russian and

their priests feared a new third language as an influence away from Russian Orthodox customs and manners. However an English school did open at St. Paul, ten to fifteen per cent of the total population of 365 on both islands attending.

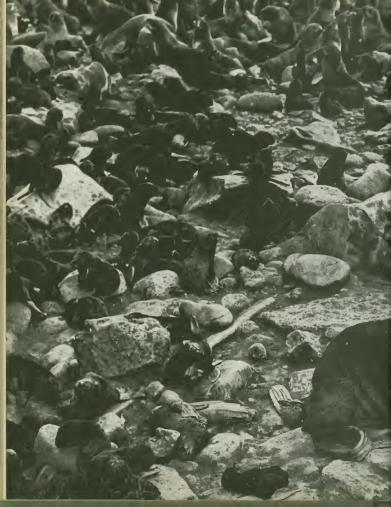
Probably the worst problem to vex the administrators was caused by the native home brew, "quas", a violation of the spirituous clause. It was a powerful drink made by fermenting flour and sugar ostensibly used as a drink of custom at religious and social celebrations.

As the new system of sealing went along the experienced hunters took quickly to new methods. On cool, foggy dawns during season, the men crept up on bachelor herds, walking between seals to be taken and the free surf or seals to be left. Several thousand were guided along by low calls or the light clatter of dry bones because fear and heat caused perspiration that loosened the fur. At the slaughtering grounds near the villages, the men would go to breakfast while the seals rested.

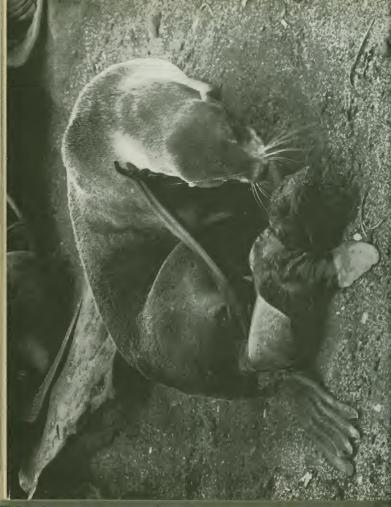
They were then sorted carefully for age, sex and condition of fur and seals that escaped were driven back to their beaches. The ones to be taken were herded into a small circle and a well-placed blow by the sealing club between the brain and ridge of the snout, followed perhaps by another for certainty, meant another pelt was ready for a sharp knife.

Men, women and children fell to skinning quickly to finish all seals in half an hour. Pelts were taken to the salt house, examined for defects, the flesh side salted and piled with fat sides together. Here they stayed for 40 days, were tied in pairs with fur still outside and shipped in wooden casks to San Francisco.

MOTHER RNOWS (Next two pages) The fur seal cow can recognite her pups from thousands all looking alike. If the mother should die the pups will perish as no other fur seal cow would care for them. Many pups are killed by the bulls, seven or eight times as big as the cows and cardess where they put their flippers when out for a stroll. (U.S. Fish and Wildlife Service)







While legal action was being brought against the government for claimed irregularities in awarding the original sealing contract to Alaska Commercial Company, actual raiding began on the seal herds. Seal skin prices were rising in London and the seals on their annual migration home to the Pribilofs were prey to shooting and spearing expeditions. The wanton killing was disastrous as there was no respect for sexes. Killing a female cost three seals—the mother, the orphaned pup and the unborn. Gunfire frightened other seals who fled to die on strange beaches.

Early on the morning of August 30, 1874, two weeks after the bark Cyane and steamer Alexander had left with the legal harvest of almost 100,000 skins, a schooner was sighted off 5t. Paul. The local agent, Benjamin McIntyre and first native chief Kerek Butrin, at first supposed she was a ship of the Alaska Commercial Company and set a flag to indicate the best landing point, but the schooner stayed outside, running behind

Otter Island about eight miles distant.

Here the men surprised and boarded her. She was the Cygnet out of Santa Barbara, Capt. Samuel Kimberly, master. And depredation showed everywhere. Carcasses of fur seals hung in the rigging, pelts piled on deck, blood and offal was everywhere. The captain tried to excuse all this on the grounds he was taking customary food for his Kolosh Indian crew from Southeastern Alaska. He claimed he had taken only 160 sea otter pelts and two fur seals but allowed no inspection of the vessel and vowed to keep what he had taken.

McIntyre and Butrin could only warn and lecture and Kimberly set sail. But he did not go far. The next day Treasury Agent William J. McIntyre, on St. George Island, and not knowing what had already transpired, saw a schooner shooting seal. He signalled her to come ashore but there was no answer. Heavy seas almost swamped the agent's whale boat and he sent out orders by

native bidarka.

The ship was of course Kimberly's and he came to the beach making pretense of being astonished he had violated laws of the United States. Mc-Intyre surrounded himself with armed natives and read the law to the master, that "any person

violating the law if convicted could be fined and imprisoned, his vessel forfeited to the United States." After some feeble excuses, Kimberly handed over 35 seal skins, all obviously ones he would have rejected normally.

A rash of private forays set in. The schooner Occan Spray chartered from San Francisco by a Frank Howell and commanded by a Dr. Thatcher who had been connected with another such expedition earlier, was blown into a fog off St. Paul where agents captured them. Thatcher admitted he planned to seize Otter Island, not included in the seal contract, and hold it by force. He was warned, allowed to proceed for Unalaska. The Indian crew mutinied, the ship was seized and taken to the District of Oregon for legal action.

In 1879 a new Special Treasury Ågent was appointed, Harrison G. Otis, later to found the Los Angeles Times. He arrived in time to seize the schooner Lolita for illicit furs in her cargo. Otis had perhaps more troube with the natives than he did with raiders. Quas brewing was done throughout the islands and the agent wrote Washington, "Raw quas takes rank as the most villianous compound that ever transversed the human gullet, making the drinker not only drunk but sick and unfit for work even after the stupor has passed off."

To combat the evil all sweets were cut off from sale at the store and then from the entire St. Paul vilage. A strike resulted, the St. Paul sealers throwing down their clubs—no sugar no

seals. Only the threat of importing Unalaska laborers brought them back to work.

Five years later George R. Tingle replaced Otis and he was immediately alarmed at the pirate raids on the islands, unable to understand how the small islands had withstood seizure for 15 years by the desperate poachers. The next year the cutter Corum. Capt. C. L. Hooper, halted three schooners and seized illegal sealing clubs from the City of San Diego, Sierra and Vanderbilt. Hooper was ordered to capture all seal poaching vessels, whether they flew the Stars and Stripes or Union lack.

Through the years the new system of sealing under contract had been attacked from other angles. Disappointed bidders had brought suit in San Francisco on the grounds that the contract had been obtained illegally. By 1875 the criticism of the Alaska Commercial Company had been intensified by the higher seal fur prices and the loudest critic was the Alaska Herald. The cry was then taken up in a pamphlet circulated in

AFUS 25AL 18 20PM (opposite) Each summer the American furseal herd returns to the Prebliof Islands, to give hieth on the young and to mate. Most of the births occur between the middle of June and end of July, multiple ones were rare. A fur seal pupweighs from 10 to 12 pounds at birth, is utterly helpless, totally dependent upon its mother. Should the mother be killed, pupnot her own. (Gourtesy Dr. Wilford Otten, Course a pupnot her own. (Gourtesy Dr. Wilford Otten, Course and

Alaska and Washington, "A History of the Wrongs of Alaska, An Appeal to the People and Press of America, printed by order of the Anti-Monopoly Association of the Pacific Coast." A Charles Leege was listed as the focal point of this attack. The charges included low pay to the natives but in government hearings a San Francisco newspaper writer, Robert Desty, who had himself written some of the charges, testified of the concerted effort being made by disgruntled fur dealers to discredit the administration of the contract. The hearings were unable to disclose any failure of performance.

The last year of the Alaska Commercial contract was carried out under extreme difficulties. The winter was the most severe of its operation, a southwester taking out the St. Paul landing facilities. A native shot himself to death, three broke open the medical stores and drank up the liquid contents. The homecoming bulls escaping pirates were late in arriving, the cows later still

and to fill its quota the contractors were forced to accept small skins and pups from the native food allotment.

As for the poachers there were estimated to be 35 butchering seals in the area. Revenue cutters captured the Mattie with 418 skins and Black Diamond with 76. Like most raiders they paid no penalties and the arrests only made worse relations betwen the U.S. and Canada. Instead of proceeding to Sitka as ordered, the latter vessel's master, Capt. Thomas, overpowered the American seaman on board and returned to his home port off Victoria, B. C. Canadian newspapers accused the U.S. of depriving the captain of his honest right to ten thousand sea skins —and Capt. Thomas continued to hunt seals.

1880 saw a change in the contractor as the Alaska Commercial Company bid too low. North American Commercial Company took over, backed by London financiers, the new Pribilof superintendent George R. Tingle, former Treasury agent.

THE OLD BUSCHMANN CANNERY at Boca De Quadra. (Courtesy Eigil Buschmann, Seattle.)



WHALE, HO!

"Port bow!" called the lookout from the crow's nest.

"Gunner ready!" the captain ordered.

From the deck nothing was visible in the thinning fog but hundreds of whale birds flying gulllike over the long sea troughs. Then the helmsman pointed.

"He's right. There's one blowing. Another full and by."

"Humpbacks," said the captain. "Five or six of them."

The gunner had now mounted the bow platform and watched the two streams of vapor and air rising from the whales clustered three hundred yards to port. They were swimming slowly in pairs. Another was blowing.

"Six knots!" the gunner commanded. The steamer rolled gently and for minutes seemed to move farther away from the quarry. "Full speed. Hard a port."

A short circle had been made and the whales were broadside to the gun. The backs of the great

animals glistened clearly as the ship bore down on them at high speed. They still swam slowly unaware of danger.

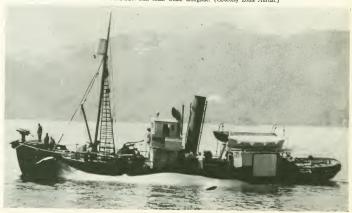
"Stop!"

With the gun's report the harpoon sped out, its line curling and looping until the iron barb lunged into the side of the nearest whale. It fell slack for a moment and then the whale sounded, its tail lashed the water into a froth, the line whipping out across the bow and coming taut to send the ship into a shudder. The second whale of the nearest pair gave a single flip of its tail and dived, the next harpoon passing a foot over the submerging back.

The other whales too had disappeared and only the birds were left swooping and fluttering over the stained, frothy water. Up through this the whale suddenly appeared spouting blood. It sounded immediately and again the steamer jerked as the line came stiff. Steam hissed at the winch and the line was worked in, then given a hundred vards of slack. When it straightened the ship was

being towed.

KILLER BOAT PATTERSON with small whale alongside. (Courtesy Louis Aurdal.)





HOW MANY CORSET STAYS DID HE MAKE? — The only right whale brought to Kyuquat plant. Valuable principally for its gill bones (whale bone) the right whale cruises the Arctic Ocean, is seldom seen south. (Provincial Archives, Victoria, B.C.)



WHALE KILLER-STAR NO. 2 was built in Seattle in 1892 for the United States Whaling Company. She was 96'x19.5'x12.3', a steel vessel, powered by 400 h.p. steam engine, single screw. (Seattle Maritime Historical Society.)



RIGHT WHALE brought in to Port Hobron, Alaska, in 1932, probably the last one of its kind shot in Alaskan waters. (Courtesy Louis Aurdal.)

The water breaking off the bow was redder with bits of gore floating in it and up came the whale again. The spout of blood and water was shorter and when it sounded the line went slack almost at once. The winch man pulled it in again and the ship was moving slowly astern.

When the humpback was drawn alongside the ship stopped. The air hose was lowered, the pumps filling the great cavities. A flag was embedded in the thick hide and the harpoon cut out. A line was looped around the tail and the men cut that section off, setting the carcass adrift. The engines were ordered full speed ahead and the whaler set off in search of another school.

The Thlinkets, Metlakatlas, Aleuts and other North Pacific Indians considered the whales great prizes. Their size alone made them challenging catches and they furnished tons of fat, delicious meat for whole villages, the bones and teeth making fine weapons and ornaments. The fringe bone in the upper jaw, called baleen or whale bone, was flexible and could be bent for many uses.

They attacked the whales from their small cances or dugouts using a sharp, wooden stick for a harpoon. From the harpoon a long sealhide line ran to a heavily-weighted float. The whale was allowed to run with the float until it tired and the hunters attacked it again, hacking it with axes or picks until it eventually died.

The early white men carried on these crude methods, showing little ingenuity for a hundred years. Legend had it some white whalers would poison the harpoon, the animal dying of the infection and drifting ashore. But man's inventiveness finally caused them to fashion iron harpoons with spurs that prevented them from working loose in the whale's flesh.

Whaling became an industry in the Bering Sea in the 1800s when conservation drove Swedish and Norwegian whalers out of their own

HARDY BREED — Akutan station whalers Olsen, Svenslid and Wilson, left to right. (Courtesy Olaf Svenslid.)





WHALE DOWN!—Whale gun, loaded and ready to go with line statched. Beneath the harpson lies the "frequent" carefully colled to run out freely and not pull harpson off its course. One end of foregore was spliced into an eyelet on harpson, was made of fine manila rope, had circumference of 4½". Other end was spliced into "whaling line", also for high-grade manila—a full 6" in circumference. (Courtesy) Colf Svensitid.)

KILLER BOAT UNIMAK of Alaska Whaling Company towing whale into port. (Courtesy Olaf Svenslid.)





OADED WHALE GUN on the bow of killer boat Patterson. (Courtesy Louis Aurdal.)

waters. They found the most profitable fields in Aleutian waters where the humpback, sulphurbottom and gray whales abound. Then New Englanders joined the hunt and by 1850 there were 700 vessels in the North American whaling fleet which supported 50 thousand men.

They were hard-bitten fellows, for the most part adventurers and dare-devils. They did hard work with certain courage and for pleasure took pillage and plunder. Whaling crews invaded many a peaceful Eskimo settlement, raped the women and made slaves of the men. Whole villages were razed and from bitter experience the mere sight of a whaling vessel's rigging was enough to put entire native villages to flight.

Whale hunting was a rough and hazardous way of making a living. When the cry "Whale, ho!" rang out of the rigging several small boats were quickly manned, an expert harpooner in each bow. The oarsmen drove the boats to within fifteen or twenty feet of the whale and the harpoon was hurled with practiced skill and great strength.

With the harpoon in its side the whale would sound, head down toward deep water. But it soon returned to the surface to blow and the little whale boat was in for a perilous tow, known among whalers as the "Nantucket sleigh ride."

If the harpoon had hit a vital spot all was well. The whale would soon tire and could easily be killed with thrusts of the killer lances. But if the

TARGET FOR TODAY Rare photograph of whale gun in action. With feet braced against the roll of the fast-moving killer boat, gunner has just pulled the trigger. Harpoon is finding its mark and the whale is in for a tough fight - one it cannot win, (Courtesy Olaf Svenslid).





REFUELING OPERATION? — Air being pumped into dead whale to make carcass float. (Courtesy Olaf Svenslid.)

A TON A FOOT — Stripping the blubber off humpback whale, weight averaging one ton per foot of length. (Courtesy Olaf Svenslid.)





LAST CRUISE FOR BIG BLUE — Ninety-four foot blue whale, one of the largest ever caught in Alaskan waters, on its way to Akutan whaling station, (Courtesy Olaf Svenslid.)

animal was only slightly hurt, the wound a mere tear in the flesh, the hazardous ride might last for hours. And often the wounded whale would lash out its great tail and smash the frail boat.

The two species most valuable and most vigorously hunted were the right-whale, valued for its its baleen, and the sperm whale, rich in sperm oil which went into the making of toilet soaps and beauty creams. Occasionally rich finds of ambergris were made. The meat and blubber residue was ground into meal for fertilizers.

When whaling became a business the harpoon-

ing from small boats was painfuly inadequate and led to the development of the harpoon gun or cannon mounted in the bow of the steam whaler. The success of this method is attributed to the ingenuity of Svend Foyn.

A successful Norwegian sealing skipper, Foyn turned his attention to whaling. On his trips up and down the long coast of Norway to his seal hunting grounds in the Arctic, he had seen whales in great numbers and knew they represented tremendous wealth if they could be caught and killed simply and quickly.

ADDUOGESCO

WHALES PROCESSED HERE Part of station at Kyuquat, Vancouver Island, B.C. Long building at right was canning plant for whale meat. (Provincial Archives, Victoria, B.C.)



DOWN TO BARE BONES — Stripped for meat and blubber, whale's carcass ready to be hauled in to meat house where bones were sawed into handling-size pieces and converted to bone meal. (Courtesy Olaf Svenslid.)

In 1864, Foyn gave up sealing, built a small steamboat and began hunting this great mammal of the northern seas. He followed the old method of hurling the harpoon from a row boat, the line tied to the boat. He soon found out however it was dangerous to attack the giant sulphur-bottoms this way. They were too strong and too agile. More often than not they would tear loose and he would have nothing for his time and effort. Clearly this was not the way to kill whales.

And Svend Foyn was not a man to give up. He tried various new methods, such as shooting four harpoons at once into the whale. This was not satisfactory so he had a much larger gun built, one which would shoot a harpoon carrying a heavier line—as large as six inches in circumference. This worked better. Now he could at least hold the whale. But it still took a long time to kill and lost much valuable time.

It was here Foyn got the idea which was to



AKUTAN VILLAGE — home port of Alaskan Whaling Company, about 1910. Station was located farther up bay. (Courtesy Olaf Svenslid.)



PAY DAY AT NEAH BAY— "The principal subsistence of the Makahas is drawn from the ocean and is formed of nearly all its products, the most important of which are the whale and halibut," write James G. Swan in 1868. The Makaha Indians shown here overpowered whale and brought it in to Neah Bay. (Washington Historical Society)

make commercial whaling a world-wide, multi-million dollar business—a harpoon that would kill the whale with one powerful thrust. He experimented with his idea and put all his money into development. "Svend is dead broke" his friends were saying. "He has lost not only his money but also his reason."

They could not have been more wrong. The experiments proved the invention a success. Here was a harpoon which carried in its tip a deadly bomb, timed to explode one second after entering the whale.

The whaling industry accepted the new weapon enthusiastically and in 1873 Svend Foyn received a 10-year patent on his harpoon. With success came financial reward. Many improvements were made in this harpoon since that day but whaling was indebted to the method invented and developed by this perserverent Norwegian.

The great storm of 1871 took crippling toll of the North Pacific whaling fleet, thirty-seven vessels being caught in the ice. Several were driven by the floes into the shoals near Icy Cape, one crushed and two drifting away with the small ice field. Then the whole ice pack settled toward the northeast, carrying the thirty-seven imprisoned vessels with it. Twelve hundred men, and the few women took to the boats, rowing them across the short stretches of open water and dragging them across barriers. After much hardship they

reached the southern edge of the pack and seven ships free from the ice. These ships sailed and reached Honolulu safely. One of the missing ships was found the following year and all aboard were saved. The other had been crushed like an eggshell betwen ice floes. The total loss in vessels was more than three million dollars

Five years later another great battle with ice occurred and mass tragedy resulted. The ice came down early in August and thirty vessels were caught. All but seventy men elected to attempt to get to land and some civilization by boat and braving the wind'swept ice plain. They endured fearful hardships, many of them dying. Seventy men and thirty ships were never heard from.

WHALING STEAMER S.S. ORION — Photograph taken at the wreck of the Valencias. (Seattle Historical Society.)





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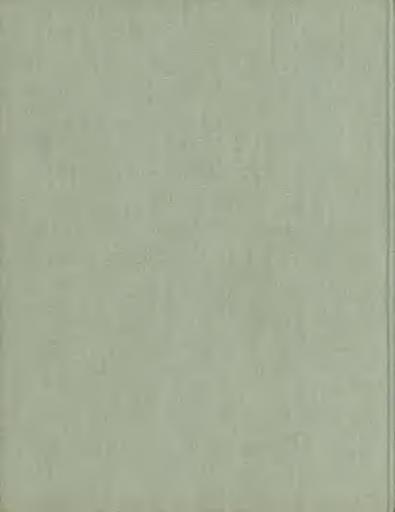














THEY BUILT BIG FORT WALTER — Under command of Eigil Buschmann, this crew of men built the canners at Big Port Walter, Alask, in the spring of 1917, In foreground, dog at his feet, is Elinar Beyer, become Alaska fish packer and former Norwegian consul as Seattle. On his left is young Haakon Friele, now president of Nakat Packing Corporation, (Courtews Eigil Buschmann)

1892 up to 1,323,000 cases which represents in value, approximately \$6,549,000.

"What a contrast between the years 1867 and 1892, as regards the industry. At the first date one cannery, with its small product, having great difficulty in obtaining sufficient employees to prosecute the business, while in 1892, in addition to the large number of canneries in British Columbia and on the Columbia River, which were employees to

ploying thousands of people, there was not a stream putting into the ocean along the Oregon and California coast, which can be entered even by the lightest draught vessels, that has not one or more canneries located on its banks, forming a nucleus from which radiate the development of other industries; while along the whole coast, from California to Alaska, the business has become an important factor in the development of such sec-



CANNERY RUINS - Libby, McNeil & Libby cannery at Koggiung, Bristol Bay, was burned to the ground in 1915. (Courtesy Nels Brastad.)

tions as have heretofore been considered almost inaccessible, by offering inducements which have sent the pioneers ahead to begin the work of civilization, that in a few years will furnish, in addition to the large number now engaged, homes and employment to a vast number, if rightly fostered, without the stimulating influence of which these sections would remain desolate for centuries.

"The salmon industry of the Pacific Coast has furnished lucrative employment to thousands, and has been both directly and indirectly the means by which very many have made fortunes, and who without its benefits would perhaps find themselves out of employment and lighter in pocket.

"In view of the great importance of this industry, it would seem the imperative duty of all engaged or in anywise interested in the business to protect and preserve, so far as possible, the source from which the essential factor springs, namely, the salmon of the Pacific Coast; and the best efforts of the minds of those who are in any manner familiar with the conditions which are favorable to that end should be turned in that direction. The writer, firmly believing in the principles set forth in this section, although well aware that there is much yet for him to learn regarding the matter, proposes to give to the public as the result of the observations of a lifetime, a series of articles, wherein will be contained a history of the experiments made and experience gained by constant contact with the business in its various forms, hoping thereby not only to add his mite to the general fund of knowledge of the subject, but also to call forth from others such information as may have been

gained by their experience, in order that, ere the streams of our State have been exhausted, and while such information may be of practical use, that the public may receive the benefit.

It is believed the first salmon cannery on Puget Sound was established by James Tarte, in the year of 1882, at Semiahmoo, near the Canadian border. D. R. Lord's cannery was started at Samish, 1887, D. Drysdale's cannery at Semiahmoo, 1891, and E. A. Washan's cannery at Point Roberts, 1892.

The Pacific American Fisheries Co. was organized in the late 90s with a capital of some five million dollars. About 10 years later the "P. A. F." was said to be the "largest salmon cannery in the world," with a productive capacity of 1000 cases of salmon per hour—800 pounds per minute of full operation.

British Columbia's first attempt at salmon canning was on the Fraser River in 1870. It has been described by J. E. Gibbard in his "Early History of the Fraser Valley":

"... There was formed in 1870 the firm of Alexander Loggie and Company—including Annandale's partner, Alexander Ewen, the pioneer white fisherman of the river—which built at Anneivlle, about three miles below New Westminster on the south side of the river, the first salmon cannery in the colony. Almost devoid of machinery, and without pressure cooking, the process was crude in the extreme, but it was the beginning of one of British Columbia's major industries."

"The industry grew rapidly during the next few years," says Gordon Taylor in his "Delta's Century of Progress" "Salmon canneries soon



CANNERS CONVENE — On Sept. 4, 1915, the Association of Pacific Fisheries representing the commercial fishing industry on the Pacific Coast, met with the American Fisheries Society for a joinet excussion up Mt. Tamalpais, California Among the more than one hundred persons attending were Henry F. Fortmann, president, and A. K. Tichnor, secretary, of Alaska Packers' Association; Lee Wakefield of Apex Fish Co. and Wakefield & Co.; P. E. Harris of P. E. Harris & Co.; Christian Semidt of Semidt & Co., Astoria, Ore.; Robert Forbes, Alaska general superintendent of Pacific American Fisheries; D. W. Branch of Libby, McNell & Libby, Ch. Chafels H. Gibbert, professor of zoology, Stanford University; Senator R. S. Farrell of Pillar Rock Packing Co. (Courtesy Howard Wakefield.)

house base, leasing from J. R. Heckman a dock and building on the present Thomas Basin breakwater. A summer operation at Little Port Walter supplied the halibut fleet of New England Fish Co. steamers (then using dories) as well as vessels of Booth, Independent and others. Thomas also established the cannery at Little

Thomas also established the cannery at Little Port Walter in 1916 with L. H. Wakefield, canning kippered herring and salmon, scotch curing herring. In 1918 he established the Franklin Packing Company at Port Ashton, scotch curing herring and the next year increased the operation to kipper herring and can salmon, installing a fish reduction plant in 1920.

Two years later he sailed with the four-masted schooner Henry Wilson to Kodiak Island for herring, basing his own operations at Ishut Bay, Afagnak Island. During these latter years his son Franklin R. Thomas was an associate in the various enterprises.

SALMON TRAIN — A full train load, sixteen box cars filled with canned salmon, left New Westminster on Canadian Pacific Railroad for eastern Canada in 1887. Note cordwood on tender. Man in white helmet is W. L, Fagan. (City Archives, Vancouver, B. C.)



FRIDAY HARBOR CANNERY WAS SWIFT SUCCESS

recalls Capt. William P. Thornton in letter to Friday Harbor Journal, June, 1958

"I am writing to thank my many friends in San Juan County for the nice Christmas cards and letters that I received when I returned home from California. I must say there was one letter which mean more to me perhaps than any other. It was Frank Mullis, a very dear old friend. He accuses me of giving him the first job that he ever had outside of San Juan County, and that was working in Port Townsend for the Tibbals Dock. He stayed in that job for seven years and perhaps could have stayed there the rest of his life if he had wanted to.

"Now I am going on from here, taking you

back 60 years when I was a boy in Friday Harbor. My brother-in-law, Ashton Thomas, was the Sheriff of San Juan County at that time. He was also proprietor of the Bay View Hotel, now the San Juan Hotel, and I was helping him there. Sheriff Thomas and his two brothers had a little tract of land on Waldron Island and they were building a boat. I'll say at that time San Juan County and the entire United States was in the grip of a great depression. There was no employment for anybody. The wages for young men at that time were about \$20 a month, and a girl



NAKEEN CANNERY at Bristol Bay in a later day. (Photo by Neil P. Ortwein, courtesy George Johansen.)

